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# ARRANGEMENT OF THE ANNUAL REPORTS OF THE WAR DEPARTMENT FOR THE FISCAL YEAR ENDED JUNE 30, 1918.

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## **Volume I.....**Secretary of War.

Chief of Staff.

The Adjutant General.

Inspector General.

Judge Advocate General.

Quartermaster General.

Surgeon General.

Chief of Ordnance

Chief Signal Officer.

Chief of Militia Bureau.

Chief of Coast Artillery.

Chief of Construction Division of the Army.

Director Military Aeronautics.

Director Tank Corps.

Director Chemical War Section.

Director Air Craft Production.

Superintendent Military Academy.

Chickamauga and Chattanooga Park Commission.

Gettysburg Park Commission.

Shiloh Park Commission.

Vicksburg Park Commission.

## **Volume II...**Chief of Engineers (without Appendices).

## **Volume III..**Chief of Bureau of Insular Affairs.

Governor of Porto Rico.

The Philippine Commission.

III





## CONSOLIDATED CONTENTS.

---

**Report of the Chief, Bureau of Insular Affairs, 1918.**

**INDEX.**

**Report of the Governor of Porto Rico, 1918.**

List of acts passed by the Eighth Legislative Assembly.

List of appointments by the Governor.

Personnel of Insular Police Force.

List of franchise ordinances passed by the Executive Council.

Statistical data concerning civil service operations.

Report of the Secretary.

Report of the Commissioner of Health.

Report of the Auditor and consolidated statistics.

Report of the Treasurer.

Report of the Commissioner of the Interior.

Report of the Commissioner of Education.

Report of the Attorney General.

Report of the Commissioner of Agriculture and Labor.

Report of the Food Commission.

**INDEX.**

**Report of the Governor General of the Philippine Islands, 1917.**

Report of the Governor General.

Report of the Secretary of the Interior.

Report of the Bureau of Non-Christian Tribes.

Report of the Secretary of Public Instruction.

Report of the Secretary of Finance.

Report of the Secretary of Justice.

Report of the Secretary of Agriculture and Natural Resources.

Report of the Department of Commerce and Communication.

**INDEX.**



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**REPORT OF THE CHIEF OF THE BUREAU OF  
INSULAR AFFAIRS**

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# CONTENTS.

---

	Page.
Letter of transmittal.....	5
Philippine Islands.....	7
Commerce:	
Total foreign trade.....	7
Manila hemp shipments.....	7
Sugar shipments.....	7
Copra shipments.....	8
Coconut oil shipments.....	8
Leaf tobacco shipments.....	8
Cigar shipments.....	8
All other shipments.....	9
Bonded indebtedness.....	9
Railway bonds.....	9
Gold standard fund.....	9
Silver coinage.....	10
Paper currency.....	11
Insular receipts and disbursements.....	11
Porto Rico.....	12
Commerce.....	12
Total foreign trade.....	12
Sugar shipments.....	12
Coffee shipments.....	12
Leaf tobacco shipments.....	12
Cigar shipments.....	13
Fruit and nut shipments.....	13
All other shipments.....	13
Receipts and expenditures.....	14
Bonded indebtedness.....	15
Dominican customs receivership.....	15
Statement of the customs service.....	15
Statement of sinking fund.....	16





**REPORT**  
**OF THE**  
**CHIEF OF THE BUREAU OF INSULAR AFFAIRS**  
**TO THE**  
**SECRETARY OF WAR.**

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**WAR DEPARTMENT,**  
**BUREAU OF INSULAR AFFAIRS,**  
*Washington, June 30, 1918.*

**SIR:** The past has been a busy year in the administration of insular affairs. All of the difficult questions arising in supply and production as the result of the war, as well as the difficulties of transportation, were emphasized in the islands. These questions have required the constant attention of the insular governments, but have been, on the whole, satisfactorily solved as they presented themselves.

The year has been a prosperous one in the islands, marked by civic progress, increased production, and, in the main, high prices for products, notwithstanding the excessively high freight rates and at times the shortage in transportation.

In order to make this report as brief as possible and at the same time to give the information necessary to connect it with preceding and following reports, I have appended the usual statistical tables.

The outstanding feature in insular affairs for the past year was the heartfelt display of patriotism of the people of our islands and their determined support of our war policies. This was accompanied by a feeling of continued satisfaction of the people with their present organic laws. It has been unnecessary to go to Congress for legislation amending in any way these laws.

**PERSONNEL.**

All of the officers of the insular governments by appointment of the President have continued at their posts throughout the year. This has been the first year since the United States took over the islands that it has not been necessary to record changes in the personnel so appointed. In view of the fact that of all years this has been the one when such officials have been most tempted to leave their

posts, this condition is a tribute to their patriotism as well as to their deep interest in the affairs committed to them.

The attraction of military service, however, has been too strong for the American civil-service personnel, and both in the Philippine Islands and in Porto Rico a great number of faithful employees of many years' service have joined the Army.

In the Bureau of Insular Affairs itself, Maj. Fred R. Brown was appointed lieutenant colonel and assigned to one of the new regiments organized at the beginning of the war, leaving the bureau August 21, 1917. He has not been replaced.

A number of the faithful civil-service employees to whom reference has been made in practically all of the past reports have likewise left the bureau, some to enter the military service and some attracted to the other bureaus that have been so expanded as a result of the war. Every effort was made, notwithstanding the increase of the duties of this bureau, to prevent its expansion at this time when the demand for efficient employees experienced in Government service was so great. This result has been accomplished, but only by sacrifice on the part of those who have remained with the bureau doing increased and faithful work.

FRANK MCINTYRE,

*Major General, U. S. Army, Chief of Bureau.*

The SECRETARY OF WAR.

## APPENDIX.

### PHILIPPINE ISLANDS.

#### TOTAL FOREIGN TRADE.

Twelve months ending Dec. 31—	Consign- ments from United States.	Consign- ments from other countries.	Total.	Shipments to United States.	Shipments to other countries.	Total.
1908.....	\$5,101,336	\$24,064,284	\$29,166,120	\$10,450,755	\$22,150,317	\$32,601,072
1909.....	6,445,331	24,639,088	31,084,419	14,726,513	20,197,824	34,924,337
1910.....	20,068,542	29,650,819	49,719,361	17,241,725	23,386,738	40,628,463
1911.....	19,156,987	28,867,420	48,024,407	19,827,030	24,760,261	44,587,291
1912.....	24,309,010	37,358,941	61,667,951	22,814,238	31,970,500	54,784,738
1913.....	23,676,361	26,638,525	53,312,786	16,434,018	31,338,938	47,772,956
1914.....	24,020,395	24,568,258	48,588,653	24,427,710	24,261,924	48,689,634
1915.....	26,381,069	22,931,115	49,312,184	23,653,211	30,159,793	53,813,004
1916.....	22,862,673	22,633,665	45,496,338	35,648,133	34,289,050	69,937,183
1917.....	37,620,048	28,176,383	65,797,031	63,234,359	32,369,948	95,604,307

#### MANILA HEMP SHIPMENTS.

Twelve months ending Dec. 31—	Total.			Shipments to United States.		
	Long tons.	Dollars.	Dollars per ton.	Long tons.	Dollars.	Dollars. per ton.
1908.....	129,313	16,501,956	128	60,344	7,797,626	129
1909.....	165,299	16,896,000	162	99,028	10,434,041	104
1910.....	160,595	16,475,311	103	74,335	8,397,310	113
1911.....	146,209	14,520,127	99	62,924	6,802,790	108
1912.....	172,311	22,075,671	128	74,805	10,779,137	144
1913.....	117,928	21,121,084	179	46,400	9,787,216	211
1914.....	114,547	19,194,815	168	49,348	9,619,376	195
1915.....	139,767	21,339,100	153	68,157	11,351,383	167
1916.....	135,147	26,691,969	198	65,296	13,639,509	209
1917.....	166,758	46,807,780	281	94,070	29,645,548	315

#### SUGAR SHIPMENTS.

Twelve months ending Dec. 31—	Total.			Shipments to United States.		
	Long tons.	Dollars.	Cents per pound.	Long tons.	Dollars.	Cents per pound.
1908.....	142,448	5,703,641	1.79	45,969	1,966,166	1.91
1909.....	127,284	5,608,287	1.97	52,234	2,649,604	2.26
1910.....	119,552	7,224,385	2.70	99,109	6,214,226	2.80
1911.....	205,392	11,040,673	2.40	184,345	10,067,103	2.44
1912.....	193,962	9,800,340	2.26	171,763	7,005,114	2.37
1913.....	154,848	7,032,889	2.03	30,232	1,564,036	2.31
1914.....	232,761	11,059,593	2.12	166,851	8,241,853	2.21
1915.....	207,679	11,310,215	2.43	81,532	5,141,580	2.82
1916.....	332,158	18,587,593	2.50	129,801	8,633,701	2.97
1917.....	202,655	12,277,679	2.70	61,392	5,405,759	3.93

## PHILIPPINE ISLANDS—Continued.

## COPRA SHIPMENTS.

Twelve months ending Dec. 31—	Total.			Shipments to United States.		
	Long tons.	Dollars.	Dollars per ton.	Long tons.	Dollars.	Dollars. per ton.
1908.....	95,954	6,058,886	63	3,720	220,892	59
1909.....	107,310	7,672,865	72	5,850	422,178	72
1910.....	118,580	10,639,049	90	7,025	638,783	91
1911.....	139,901	13,019,562	93	14,969	1,378,345	92
1912.....	140,536	14,183,466	101	20,858	2,021,553	97
1913.....	80,920	9,545,724	118	9,870	1,199,083	121
1914.....	85,965	7,980,270	98	17,894	1,606,133	90
1915.....	136,865	11,111,555	81	20,882	1,760,046	84
1916.....	71,135	7,115,971	100	34,910	3,539,564	101
1917.....	90,724	8,327,151	92	67,175	6,117,951	91

## COCONUT OIL SHIPMENTS.

Twelve months ending Dec. 31—	Total.			Shipments to United States.		
	Pounds.	Dollars.	Cents per pound.	Pounds.	Dollars.	Cents per pound.
1908.....	8,097,022	342,280	4.23	4,728,759	205,052	4.34
1909.....	.....	.....	.....	.....	.....	.....
1910.....	139	16	11.51	.....	.....	.....
1911.....	1,455	40	2.75	.....	.....	.....
1912.....	11,045,992	1,146,339	10.38	10,583,950	1,085,438	10.34
1913.....	26,330,263	2,619,183	9.95	26,228,071	2,607,163	9.94
1914.....	29,683,107	2,820,502	9.50	29,470,943	2,804,632	9.52
1915.....	35,474,591	3,925,735	11.07	33,740,758	3,694,374	10.95
1916.....	99,644,426	11,409,147	11.45	99,307,728	11,377,650	11.46
1917.....	.....	.....	.....	.....	.....	.....

## LEAF TOBACCO SHIPMENTS.

Twelve months ending Dec. 31—	Total.			Shipments to United States.		
	Thousands.	Dollars.	Dollars per M.	Thousands.	Dollars.	Dollars. per M.
1908.....	24,927,863	1,708,756	6.85	.....	.....	.....
1909.....	20,909,597	1,532,086	7.33	12,172	1,669	13.71
1910.....	21,408,412	1,555,870	7.27	7,436	1,507	20.27
1911.....	26,935,055	1,810,639	6.72	5,611	744	13.26
1912.....	30,837,978	2,173,998	7.05	88,636	12,517	14.12
1913.....	28,088,987	1,854,776	6.60	9,888	2,259	22.85
1914.....	28,848,165	1,757,824	6.09	45,598	4,612	10.11
1915.....	24,136,034	1,527,106	6.33	87,384	10,086	11.55
1916.....	39,168,994	2,827,657	7.22	1,028,267	118,653	11.54
1917.....	11,335,176	1,485,452	13.10	2,999,469	602,026	20.07

## CIGAR SHIPMENTS.

Twelve months ending Dec. 31—	Total.			Shipments to United States.		
	Thousands.	Dollars.	Dollars per M.	Thousands.	Dollars.	Dollars. per M.
1908.....	115,881	1,059,328	9.14	1,182	18,376	15.55
1909.....	151,457	1,754,529	11.58	37,076	737,396	19.89
1910.....	184,407	2,759,061	14.97	61,526	1,560,799	25.37
1911.....	134,630	1,901,863	14.11	38,112	1,902,378	23.68
1912.....	190,842	3,092,064	16.20	90,000	1,958,321	21.76
1913.....	191,762	3,012,234	15.71	71,513	1,642,888	22.97
1914.....	154,753	2,315,159	14.96	56,205	1,200,126	21.35
1915.....	134,648	2,057,303	15.28	61,170	1,151,222	18.82
1916.....	193,026	2,844,376	14.74	111,478	2,033,121	18.24
1917.....	284,525	4,794,096	16.85	202,199	3,862,983	19.10

## PHILIPPINE ISLANDS—Continued.

## ALL OTHER SHIPMENTS.

Twelve months ending Dec. 31—	Total			Shipments to United States.		
		Dollars.			Dollars	
1908.....		1,226,225			242,343	
1909.....		1,460,570			481,625	
1910.....		1,974,171			429,100	
1911.....		2,294,427			675,670	
1912.....		3,459,159			1,037,596	
1913.....		4,059,910			1,143,098	
1914.....		3,762,793			1,148,447	
1915.....		3,647,223			1,434,352	
1916.....		7,943,882			3,989,211	
1917.....		10,503,002			6,222,433	

## BONDED INDEBTEDNESS.

The bonded indebtedness of the Philippine Government, including the bonded indebtedness of the cities of Manila and Cebu, on June 30, 1918, was as follows:

Title of loan.	Amount.	Re-deem-able.	Due.
Land purchase bonds, 4 per cent.....	\$7,000,000	1914	1934
Public works and improvement bonds, 4 per cent.....	2,500,000	1915	1935
Do.....	1,000,000	1916	1936
Do.....	1,500,000	1919	1939
General bonds of 1916, 4 per cent.....	4,000,000	1926	1946
City of Manila sewer and waterworks bonds, 4 per cent.....	1,000,000	1915	1935
Do.....	2,000,000	1917	1937
Do.....	1,000,000	1918	1938
City of Cebu sewer and waterworks bonds, 4 per cent.....	125,000	1921	1941
Total.....	20,125,000		

Ample sinking funds have been provided by law for the retirement of the above-mentioned bonds at or before maturity.

## RAILWAY BONDS.

The bonds of railroads guaranteed as to interest by the Philippine Government outstanding are:

Manila Railroad Co.....	\$13,714,000
Philippine Railway Co.....	8,549,000

## GOLD STANDARD FUND.

Excess increments to the gold-standard fund to the amount of \$732,763.66 were transferred to the general fund of the insular treasury during the year under consideration, making the total transfers on this account to December 31, 1917, \$5,369,153.04. On that date the gold-standard fund consisted of \$6,736,910.41, of which \$5,370,740 was invested in loans to Provinces, municipalities, and



the Manila Railroad Co., the remainder being in secured deposits with banks at interest, or held in the insular treasury, with the exception of \$1,178,783.62 represented by accounts receivable.

### SILVER COINAGE.

During the year 1917 the price of silver made a steady advance until the bullion value of a silver peso was ₱1.22, and silver coins disappeared from circulation as soon as they were issued. The stringency occasioned by the withdrawal of these coins from circulation was relieved by the issuance of 50-centavo and 1-peso notes by the Philippine National Bank, and drastic measures were taken against persons attempting the illegal exportation of silver coins. The treasury bureau recommended a change in the coinage laws, reducing the amount of silver in the silver coins and placing them practically upon the basis of the United States silver coinage. This recommendation received favorable consideration by the Philippine Legislature, and Philippine metal money is now safeguarded to protect it from exportation should at any time the intrinsic value become greater than the nominal value.

The following statements show the total amount of Philippine coinage received from the United States mints, the amount returned for recoinage, the amount in the treasury vaults, and the amount in circulation at the close of the year, together with the amount of silver pesos sold and reduced to bullion:

Denomination.	Received from United States mints			Returned to mint for recoinage, old and new.
	Old coin.	New coin.	Total.	
Pesos .....	₱26,994,635.00	₱43,085,312.00	₱70,079,947.00	₱28,113,846.00
50 centavos.....	3,055,221.00	3,056,401.50	6,111,622.50	2,905,078.00
20 centavos.....	1,595,744.40	2,646,662.80	4,242,407.20	1,340,226.80
10 centavos.....	1,133,681.40	1,732,040.60	2,865,722.00	881,797.90
5 centavos.....	.....	629,250.00	629,250.00	6.55
1 centavo.....	.....	747,520.37	747,520.37	1,399.00
½ centavo.....	.....	88,670.00	88,670.00	37,010.36
<b>Total.....</b>	<b>32,779,281.80</b>	<b>51,985,857.27</b>	<b>84,765,139.07</b>	<b>33,279,364.61</b>

Denomination.	Withdrawn and sold for bullion purposes, new.	In treasury vaults, old and new.	In circulation, old and new.	Total.
Pesos .....	₱15,000,000.00	₱13,338,947.00	₱13,627,154.00	₱70,079,947.00
50 centavos.....	.....	196,181.00	3,010,363.50	6,111,622.50
20 centavos.....	.....	13,162.00	2,889,018.40	4,242,407.20
10 centavos.....	.....	1,003.50	1,982,320.60	2,865,722.00
5 centavos.....	.....	3,788.90	625,454.55	629,250.00
1 centavo.....	.....	834.20	745,287.17	747,520.37
½ centavo.....	.....	.03	51,659.61	88,670.00
<b>Total.....</b>	<b>15,000,000.00</b>	<b>13,554,516.63</b>	<b>22,931,257.83</b>	<b>84,765,139.07</b>

## PAPER CURRENCY.

During the year ending December 31, 1917, Philippine silver certificates were prepared at the Bureau of Engraving and Printing of the United States Treasury Department and shipped to the islands for circulation, as follows:

## Silver certificates:

2-peso notes.....	₱6,100,000
5-peso notes.....	6,850,000
10-peso notes.....	4,900,000
20-peso notes.....	1,800,000
50-peso notes.....	2,000,000
100-peso notes.....	1,000,000
	<hr/>
	22,650,000

## INSULAR RECEIPTS AND DISBURSEMENTS.

The following is a statement of insular receipts and disbursements of the Philippine Islands, exclusive of all items of a refundable character, expressed in United States currency, for the fiscal years December 31, 1914, 1915, 1916, and 1917:

	Fiscal year ending Dec. 31, 1914.	Fiscal year ending Dec. 31, 1915.	Fiscal year ending Dec. 31, 1916.	Fiscal year ending Dec. 31, 1917.
<b>CREDITS.</b>				
Balance from prior year.....	\$4,982,994.90	\$4,259,027.92	\$5,117,058.38	\$7,516,079.66
Revenues:				
Customs.....	5,422,481.79	6,072,544.58	5,801,268.35	7,575,917.11
Internal.....	4,881,904.40	6,926,367.67	8,403,654.48	10,553,135.63
Miscellaneous.....	245,665.64	481,436.40	747,348.24	9,261,567.98
Surplus gold standard fund.....	430,619.19	425,594.69	436,209.48	732,763.66
Total revenue.....	10,980,671.02	13,905,943.34	15,388,480.55	28,123,384.38
Transfer from sinking funds.....	791,376.29	370,020.41	456,207.59	
Supplies brought into account.....	34,612.64	64,451.07		
Total credits.....	16,789,654.85	18,599,442.74	21,877,352.52	35,639,464.04
<b>DEBITS.</b>				
Expenditures:				
Bureaus and offices.....	8,612,162.79	8,229,174.51	8,072,061.33	14,840,953.82
Miscellaneous.....	507,909.09	468,736.14	267,019.87	1,106,135.86
Fixed charges.....	829,550.71	858,188.49	1,073,475.49	1,048,981.05
Aid to provinces and municipalities.....	1,050,375.21	1,487,712.08	1,565,819.47	4,439,906.07
Public works.....	1,530,629.13	2,440,573.14	1,734,128.07	882,143.91
Purchase of investment and securities.....			1,648,748.63	1,114,001.82
Surplus:				
Cash.....	308,491.40	1,249,688.02	6,532,120.98	10,813,831.48
Other.....	3,950,536.52	3,867,370.36	983,948.68	1,588,510.03
Total debits.....	16,789,654.85	18,599,444.74	21,877,352.52	35,639,464.04

## PORTO RICO.

## TOTAL FOREIGN TRADE.

Twelve months ending June 30—	Consignments from United States.	Consignments from foreign countries.	Total.	Shipments to United States.	Shipments to foreign countries.	Total
1909.....	\$23,618,545	\$2,925,781	\$26,544,326	\$26,394,312	\$3,996,913	\$30,391,225
1910.....	27,097,664	3,537,201	30,634,865	32,095,645	5,964,574	37,960,219
1911.....	34,671,958	4,115,039	38,786,997	34,765,409	5,152,958	39,918,367
1912.....	38,470,993	4,501,028	42,972,021	42,873,401	6,832,012	49,705,413
1913.....	33,155,005	3,745,057	36,900,062	40,534,623	8,564,942	49,103,565
1914.....	32,598,368	3,838,419	36,404,787	34,423,180	8,679,582	43,102,762
1915.....	30,929,831	2,954,465	33,884,296	42,311,920	7,044,967	49,356,907
1916.....	35,892,515	3,058,041	38,951,156	60,952,758	5,778,815	66,731,573
1917.....	49,539,249	4,005,075	53,545,224	73,115,221	7,855,693	80,970,917
1918.....	58,945,753	4,443,524	63,389,282	66,515,650	8,779,033	74,294,683

## SUGAR SHIPMENTS.

Twelve months ending June 30—	Total.			Shipments to United States.		
	Pounds.	Dollars.	Cents per pound.	Pounds.	Dollars.	Cents per pound.
1909.....	488,512,440	18,432,446	3.77	488,452,733	18,430,750	3.77
1910.....	569,045,148	23,545,922	4.14	569,089,881	23,545,065	4.14
1911.....	645,838,403	24,479,346	3.79	645,834,403	24,479,159	3.79
1912.....	734,299,872	31,544,063	4.30	734,299,872	31,544,063	4.30
1913.....	765,400,310	26,619,158	3.48	765,400,310	26,619,158	3.48
1914.....	641,266,527	20,240,335	3.16	641,252,527	20,239,831	3.16
1915.....	588,950,493	27,278,751	4.63	588,922,493	27,277,839	4.63
1916.....	849,910,000	45,809,445	5.39	849,763,491	45,796,299	5.39
1917.....	977,886,000	54,015,903	5.52	977,377,996	53,987,767	5.52
1918.....	673,575,420	41,362,229	6.14	672,937,334	41,310,845	6.14

## COFFEE SHIPMENTS.

1909.....	28,489,236	3,715,744	13.04	126,684	17,241	13.61
1910.....	45,299,792	5,669,602	12.54	163,350	21,876	13.39
1911.....	33,937,021	4,992,779	14.71	248,941	35,726	14.35
1912.....	40,146,365	6,764,913	16.83	414,656	71,104	17.16
1913.....	49,774,197	8,511,316	17.10	773,628	132,970	17.19
1914.....	50,211,947	8,193,544	16.32	420,644	73,279	17.42
1915.....	51,125,620	7,082,791	13.66	4,159,893	542,649	13.04
1916.....	32,144,283	5,049,288	15.71	509,158	77,965	15.31
1917.....	39,615,146	5,892,081	14.87	212,024	32,456	15.81
1918.....	37,627,773	5,504,145	14.63	256,697	39,064	15.22

## LEAF TOBACCO SHIPMENTS.

1909.....	3,063,761	1,123,579	36.67	3,063,761	1,123,579	36.67
1910.....	2,975,133	1,141,804	38.36	2,924,175	1,137,529	38.90
1911.....	3,509,501	1,444,901	41.17	3,495,544	1,443,215	41.29
1912.....	4,680,781	2,228,126	47.60	4,680,781	2,228,126	47.60
1913.....	7,075,681	3,021,059	42.70	6,952,467	3,006,864	43.25
1914.....	9,244,490	3,204,610	34.69	6,304,227	2,961,614	46.95
1915.....	7,268,523	2,971,748	42.24	7,045,777	2,954,304	43.42
1916.....	6,767,478	2,864,552	42.33	6,705,823	2,837,036	42.62
1917.....	8,111,765	3,601,539	44.44	7,984,439	3,583,052	45.02
1918.....	13,206,492	7,927,760	60.03	13,121,315	7,913,676	60.30

## PORTO RICO—Continued.

## CIGAR SHIPMENTS.

Twelve months ending June 30—	Total.			Shipments to United States.		
	Thousands.	Dollars.	Dollars per M.	Thousands.	Dollars.	Dollars per M.
1909.....	142,088	4,383,893	30.85	141,537	4,375,657	30.92
1910.....	149,746	4,480,030	29.92	149,469	4,473,123	29.98
1911.....	174,484	5,355,223	30.69	174,246	5,349,626	30.70
1912.....	169,765	5,086,711	29.96	169,494	5,077,976	29.96
1913.....	165,768	5,800,696	35.04	165,524	5,800,162	35.04
1914.....	162,022	5,597,276	34.68	161,093	5,692,803	34.70
1915.....	170,264	6,016,122	35.33	169,562	6,006,680	35.42
1916.....	157,174	5,531,535	35.19	156,996	5,628,496	35.21
1917.....	205,308	7,843,010	38.20	204,893	7,834,983	38.24
1918.....	179,188	7,134,693	39.82	179,036	7,131,535	39.83

## FRUIT AND NUT SHIPMENTS.

Twelve months ending June 30—	Total.			Shipments to United States.		
		Dollars.			Dollars.	
1909.....		1,261,484			1,258,499	
1910.....		1,635,817			1,632,411	
1911.....		2,073,993			2,068,194	
1912.....		2,377,762			2,369,727	
1913.....		3,120,919			3,115,257	
1914.....		3,400,903			3,390,554	
1915.....		3,441,157			3,434,707	
1916.....		3,355,285			3,324,423	
1917.....		3,459,569			3,444,541	
1918.....		3,635,666			3,611,889	

## ALL OTHER SHIPMENTS.

Twelve months ending June 30—	Total.			Shipments to United States.		
		Dollars.			Dollars.	
1909.....		1,474,079			1,188,586	
1910.....		1,487,544			1,285,041	
1911.....		1,572,125			1,389,489	
1912.....		1,713,839			1,582,406	
1913.....		2,030,427			1,864,222	
1914.....		2,464,094			2,165,099	
1915.....		2,566,335			2,095,241	
1916.....		4,121,473			3,365,539	
1917.....		6,155,815			4,232,425	
1918.....		8,730,190			5,506,942	

## RECEIPTS AND EXPENDITURES.

A comparative statement of all receipts and disbursements of Porto Rico for the fiscal years 1916, 1917, and 1918 follows:

	Fiscal year ending June 30, 1916.	Fiscal year ending June 30, 1917.	Fiscal year ending June 30, 1918.
Balance.....	\$575,310.54	\$159,767.19	\$581,476.17
Revenues:			
Customs.....	285,500.00	378,000.00	370,000.00
Internal.....	2,879,424.40	4,093,297.18	3,532,312.26
United States internal revenues.....			1,089,685.40
Miscellaneous.....	628,353.31	486,387.70	484,081.63
Other receipts:			
Repayment of loans.....	505,080.38	608,189.59	14,210.63
Repayment of transfers.....	311,345.09	286,133.22	198,917.08
Repayments, bureau of supplies.....	342,041.05	604,327.72	896,461.09
Proceeds from bond sales and loans.....	399,656.67	301,733.33	
Total.....	5,936,691.44	6,927,835.84	7,119,144.83
Expenditures:			
Legislative.....	71,558.23	63,474.62	114,635.27
Executive.....	1,249,871.50	1,334,041.59	1,282,966.94
Insular police.....	441,205.53	431,146.37	476,621.72
Maintenance and repairs—			
Roads and bridges.....	441,780.09	676,465.74	736,911.45
Public buildings.....	39,706.62	65,985.36	93,416.44
Insular telegraph.....	71,679.29	83,948.19	99,763.09
Harbor improvements.....	462.74	4,649.32	3,004.75
Public schools.....	1,193,249.53	1,341,538.96	1,422,896.48
University of Porto Rico.....	35,380.71	50,545.98	50,205.63
Sanitation.....	207,395.99	232,549.87	482,475.64
Insular library.....	9,213.17	9,209.58	11,325.26
Bureau of supplies.....	343,766.00	706,199.79	972,480.31
Judicial.....	460,779.08	428,076.15	421,188.48
Other payments:			
Loans to municipalities and school boards.....	448,950.00	474,748.96	84,826.79
Repayments and transfers.....	733,415.86	324,779.19	72,896.27
Municipal and school board bonds.....	28,500.00	119,000.00	85,000.00
Cash balance.....	159,767.10	581,476.17	708,540.31
Total.....	5,936,691.44	6,927,835.84	7,119,144.83

## BONDED INDEBTEDNESS.

The bonded indebtedness of the insular government of Porto Rico on June 30, 1918, was as follows:

Title of loan	Amount out- standing.	Interest.	Maturing.
Road bonds:		<i>Per cent.</i>	
1907.....	\$450,000	4	\$50,000 on Jan. 1 of each year.
1910.....	425,000	4	Redeemable after Jan. 1, 1920; payable Jan. 1, 1927.
Irrigation bonds:			
1909.....	2,250,000	4	\$150,000 on Jan. 1 of each year, beginning 1914.
1913.....	1,000,000	4	Redeemable after Jan. 1, 1933; payable Jan. 1, 1943.
1913, construction and refunding.....	700,000	4	\$100,000 annually, beginning Jan. 1, 1944.
1914, construction and refunding.....	400,000	4	\$100,000 annually, beginning Jan. 1, 1951.
1915, refunding.....	400,000	4	\$100,000 annually, beginning Jan. 1, 1955.
1916, refunding.....	200,000	4	\$100,000 annually, beginning Jan. 1, 1959.
San Juan Harbor improvement bonds:			
1912.....	100,000	4	Redeemable after Jan. 1, 1922; payable Jan. 1, 1937.
1914.....	200,000	4	Redeemable after Jan. 1, 1924; payable Jan. 1, 1939.
1915.....	200,000	4	Redeemable after Jan. 1, 1925; payable Jan. 1, 1940.
1917.....	100,000	4	Redeemable after Jan. 1, 1927; payable Jan. 1, 1942.
Public improvement bonds:			
1914.....	1,000,000	4	Redeemable after Jan. 1, 1926; payable Jan. 1, 1939.
1916.....	500,000	4	Serially, 1927 to 1930.
Insular loans, refunding bonds:			
1914.....	655,000	4	Serially, 1923 to 1933.
1915.....	300,000	4	Serially, 1919 to 1935.
1916.....	300,000	4	Serially, 1918 to 1927.
Total outstanding.....	9,180,000		

## DOMINICAN CUSTOMS RECEIVERSHIP.

The following table shows the financial transactions of the receivership during the year:

*Statement of the Customs Service, Dominican Republic, for the year ending Dec. 31, 1917.*

Balance.....	\$768,364.45
Customs collections.....	5,329,826.90
Miscellaneous.....	16,776.70
Total.....	6,114,968.05
Customs expense.....	163,872.30
Payments:	
Dominican Government.....	2,456,746.23
Fiscal agent.....	2,414,644.47
Loan account, authorized Dec. 14, 1912.....	306,806.50
Other disbursements:	
Refunds.....	21,614.23
Frontier Customs Service.....	29,418.70
Revenue Cutter Service.....	25,905.28
Building fund.....	15,891.19
Exchange.....	7,843.64
All other.....	16,988.28



## Balances:

Cash in transit (deputy receivers).....	\$241,955.17
Fiscal agent.....	256,454.45
Building fund.....	152,675.72
Dominican Government.....	4,051.91
Total.....	6,114,968.05

*Statement of sinking fund, Dominican Republic, \$20,000,000 customs administration loan, as of Dec. 31, 1917.*

## RECEIPTS.

## From general receiver of customs, account calendar year:

1908.....	\$331,757.53
1909.....	200,000.00
1910.....	260,820.90
1911.....	394,092.24
1912.....	482,772.25
1913.....	782,908.34
1914.....	207,666.01
1915.....	593,588.13
1916.....	664,644.47
1917.....	1,295,042.73
From interest allowed by fiscal agent.....	134,740.58
From interest received on bonds purchased.....	680,232.70
Total.....	6,028,265.88

## DISBURSEMENTS.

For \$5,794,250 customs administration bonds purchased,  
par value.....

par value.....	\$5,794,250.00
Less discount.....	324,525.25
	5,469,724.75

## Cash balance:

In sinking fund.....	5,495.91
With fiscal agent, general account.....	208,002.49
With general receiver of customs.....	345,042.73
	558,541.13
	6,028,265.88

## ASSETS IN SINKING FUND.

\$5,794,250 customs administration bonds, at par value.....	5,794,250.00
Interest on above bonds accrued but not collected.....	120,713.54
Cash balance.....	558,541.13
Total.....	6,473,504.67

## INDEX.

---

### **BONDED INDEBTEDNESS:**

Philippine Islands: 9.

Porto Rico: 15.

**BROWN, MAJ. FRED. R., assignment:** 6.

### **CIGARS:**

Shipments from Philippine Islands: 8.

Shipments from Porto Rico: 13.

**COFFEE:** Shipments from Porto Rico: 12.

**COCONUT OIL:** Shipments from Philippine Islands: 8.

**COINAGE, silver:** 10.

### **COMMERCE:**

Value of Philippine: 9.

Value of Porto Rico: 12.

**COPRA:** Shipments from Philippine Islands: 8.

**CURRENCY, paper:** 11.

### **DISBURSEMENTS:**

Philippine Islands: 11.

Porto Rico: 14.

Santo Domingo: 16.

### **DOMINICAN CUSTOMS RECEIVERSHIP:**

Collections: 15.

Disbursements: 16.

Sinking-fund statement: 16.

Disbursements: 16.

Receipts: 16.

**FRUITS:** Shipments from Porto Rico: 13.

**GOLD STANDARD FUND,** statement of: 9.

**HEMP:** Shipments from the Philippine Islands: 7.

**INSULAR AFFAIRS, BUREAU OF:** Personnel: 5.

**MANILA RAILROAD CO.:** Bonds: 9.

**NUTS:** Shipments from Porto Rico: 13.

**PERSONNEL:** Bureau of Insular Affairs: 5.

### **PHILIPPINE ISLANDS:**

Bonded indebtedness: 9.

Cigars, shipments from: 8.

Commerce, value of: 9.

Copra, shipments: 8.

Gold, standard fund: 9.

Hemp, shipments: 7.

Shipments: 7.

Insular receipts and expenditures: 11.

Paper currency, shipments: 11.

Railroad bonds: 9.

Shipments to Philippines: 7.

Silver coinage: 10.

Sugar, shipments: 7.

Tobacco, shipments: 8.

**PORTO RICO:**

- Bonded indebtedness: 15.
- Cigars, shipments: 13.
- Coffee, shipments: 12.
- Commerce, value of: 12.
- Fruit, shipments: 13.
- Nuts, shipments: 13.
- Receipts and expenditures: 14.
- Sugar, shipments: 12.
- Tobacco, shipments: 12.

**RAILROADS: Bonds: 9.****RECEIPTS AND DISBURSEMENTS:**

- Dominican Republic: 16.
- Philippine Islands: 11.
- Porto Rico: 14.

**SANTO DOMINGO. See Dominican customs receivership.****SILVER COINAGE: Shipments to Philippine Islands: 10.****SUGAR:**

- Shipments from Philippine Islands: 7.
- Shipments from Porto Rico: 12.

**TOBACCO:**

- Shipments from Philippine Islands: 8.
- Shipments from Porto Rico: 12.



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# REPORT OF THE GOVERNOR OF PORTO RICO

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# CONTENTS.

	Page.
Report of the Governor of Porto Rico.....	3
Introduction.....	3
External commerce.....	9
Table No. 1.—Merchandise shipped from Porto Rico to the United States and foreign countries.....	9
Table No. 2.—Merchandise shipped into Porto Rico from the United States and foreign countries.....	9
Table No. 3.—Merchandise shipped into and from Porto Rico in trade with the United States.....	11
Table No. 4.—Merchandise shipped into and from Porto Rico in trade with foreign countries.....	11
Table No. 5.—Statement showing annual trade balance resulting from the commerce between Porto Rico and other ports.....	11
Table No. 6.—Merchandise brought into Porto Rico from the United States and foreign countries during the fiscal year ending June 30, 1918.....	13
Table No. 7.—Domestic and foreign merchandise shipped from Porto Rico to the United States and foreign countries during the fiscal year ended June 30, 1918.....	14
Table No. 8.—Sugar exports.....	15
Table No. 9.—Cigars.....	18
Table No. 10.—Cigarettes.....	18
Table No. 11.—Tobacco leaf and scrap exported.....	18
Table No. 12.—Coffee exports.....	19
Table No. 12A.—Coffee exported from Porto Rico during the fiscal year ended June 30, 1918.....	19
Table No. 13.—Value of fruit exports.....	22
Table No. 14.—Statement, by countries, of value of merchandise brought into Porto Rico from the United States and foreign countries for the five years ending June 30, 1918.....	22
Table No. 15.—Statement, by countries, of value of merchandise shipped from Porto Rico to the United States and foreign countries for the past five years ending June 30, 1918.....	24
Table No. 16.—Exports, by years, of sugar, cigars, and coffee.....	24
Table No. 17.—Exports and imports by years.....	25
Legislation.....	25
Executive.....	26
Proclamations and executive orders.....	26
Pardons and paroles.....	26
Health and sanitation.....	26
Public asylums.....	27
Charity schools.....	28
Insular board of health.....	28
Institute of tropical medicine and hygiene.....	29
Insular police.....	29
Civil-service commission.....	30
Board of medical examiners.....	31
Board of pharmacy.....	31
Board of dental examiners.....	31
Board of trustees of the University of Porto Rico.....	31
Board of trustees of the Carnegie Library.....	32
Insular government finance.....	32
Summary of the transactions of the insular treasury for the fiscal year 1917-18.....	33
Outstanding bonded indebtedness.....	34
Municipalities.....	35
Education.....	35

## Report of the Governor of Porto Rico—Continued.

## Insular government finance—Continued.

	Page.
Agriculture and labor.....	36
Agriculture.....	36
Labor.....	37
Auditing and accounting.....	38
Public works—roads and buildings.....	38
Roads and bridges.....	38
Buildings.....	39
Public lands.....	39
Insular telegraph.....	40
Motor vehicles.....	40
Harbors and docks.....	41
Irrigation district.....	41
Justice.....	42
Penal institutions.....	43
Reform school.....	43
Franchises.....	43
Personnel.....	43
Workmen's relief commission.....	44
Public service commission.....	45
Food commission.....	46
Conclusion.....	48

## APPENDIX I.

Exhibits to the report of the governor.....	51
Exhibit A.—Legislation: List of acts and resolutions passed by the Ninth Legislative Assembly of Porto Rico, first session.....	51
Joint resolutions.....	55
List of acts and resolutions passed by the Ninth Legislative Assembly of Porto Rico, special session.....	56
Joint resolutions.....	57
Concurrent resolution.....	57
Exhibit B.—List of appointments by the governor during the fiscal year 1917-18.....	58
Judicial appointments.....	58
Municipal appointments—alcaldes.....	59
Appointments to fill vacancies in municipal councils.....	59
Miscellaneous appointments.....	59
Exhibit C.—Table No. 1.—Personnel of the insular police force of Porto Rico at the close of the fiscal year ending June 30, 1918, showing also the number of horses and bicycles in each district.....	62
Table No. 2.—Number of felonies committed by both sexes during fiscal year ending June 30, 1918.....	64
Table No. 3.—Number of arrests made, convictions, and acquittals during the fiscal year ending June 30, 1918, for the following offenses and crimes.....	64
Table No. 4.—Number of fires which took place in Porto Rico during the fiscal year 1917-18, number of deaths caused thereby, number of and description of property destroyed or damaged, insurance carried, and the approximate amount of loss.....	66
Exhibit D.—List of franchise ordinances passed by the executive council or public-service commission and approved by the Governor of Porto Rico.....	66
By the executive council.....	66
By the public-service commission.....	67
Exhibit E.—Statistical data concerning civil-service operations during the fiscal year 1917-18.....	68
Table A.—Results of examination.....	68
Table A-1.—Examinations held for the United States civil service—	
For original appointment in Porto Rico.....	69
For original appointment to positions in the United States.....	69
Table B.—Changes in the Porto Rican civil service during the fiscal year ending June 30, 1918.....	70

Exhibits to the report of the governor—Continued.

Exhibit E.—Statistical data concernin civil service operations, etc.—Con.	
Table C.—Distribution of positions in the Porto Rican civil service, by department, salary, nationality, and classification.....	70
Table D.—Distribution of positions and salaries in classified and unclassified service, based on appropriations, fiscal year 1918-19.....	76
Table E.—Number of positions and total salaries of native and non-native officers and employees.....	76

APPENDIX II.

Report of the executive secretary of Porto Rico.....	77
Legislation.....	77
Publications.....	77
Governor's appointments.....	78
Passports.....	78
Municipal ordinances.....	80
Franchises.....	81
Pardons.....	81
Commissioners of deeds.....	81
Corporations.....	82
Associations not for pecuniary profit.....	82
United States patents and trade-marks.....	82
Domestic trade-marks.....	82
Old Spanish archives.....	83
Hunting licenses.....	84
Consular offices.....	84
Notaries public.....	84
Fees.....	84
Bureau of weights and measures.....	84
Table 1.—Instruments tested.....	85
Table 2.—Class I: New instruments tested before being offered for sale.....	86
Table 3.—Instruments rejected for repairs on first inspection and sealed or confiscated as incorrect and not susceptible of repairs upon reinspection.....	86
Table 4.—Errors found in weight.....	87
Table 5.—Drug stores inspected in the island.....	88
Table 6.—Inspection of large-capacity platform scales used to weigh sugar cane.....	90
Table 7.—Reweighings of cane deliveries.....	90
Table 8.—Reweighings of packages.....	92
Table 9.—Violations.....	94
Table 10.—Detail of violations.....	94
Bureau of supplies, printing, and transportation.....	95
Supply committee.....	96
Expenditures.....	98
Personnel.....	98
Statement No. 1.—List of commissioners of deeds for Porto Rico in the United States, appointed by the Governor of Porto Rico, and whose commissions are still in force on June 30, 1918.....	99
Statement No. 2.—Domestic corporations registered in the office of the executive secretary during the fiscal year 1917-18.....	99
Statement No. 3.—Domestic corporations dissolved during the fiscal year 1917-18.....	100
Statement No. 4.—Foreign corporations registered in the office of the executive secretary during the fiscal year 1917-18.....	100, 104
Statement No. 5.—Foreign corporations that ceased to do business in Porto Rico during the fiscal year 1917-18.....	206
Statement No. 6.—List of domestic corporations existing and doing business on June 30, 1918.....	211
Statement No. 7.—List of corporations organized outside of Porto Rico, that, according to the records of the office of the executive secretary, were in existence on June 30, 1918.....	212
Statement No. 8.—Associations not for pecuniary office of the executive secretary during the fiscal year 1917-18.....	213
Statement No. 9.—Domestic associations during the fiscal year 1917-18.....	213



## Report of the executive secretary of Porto Rico—Continued.

Statement No. 10.—Associations not for pecuniary profit organized outside Porto Rico that ceased to do business in Porto Rico during the fiscal year 1917-18.	Page. 107
Statement No. 11.—List of domestic associations existing and doing business on June 30, 1918.	107
Statement No. 12.—List of associations organized outside of Porto Rico existing and doing business on June 30, 1918.	109
Statement No. 13.—List of foreign consuls.	110
Statement No. 14.—List of notaries public registered in office of the executive secretary of Porto Rico on June 30, 1918.	111
Statement No. 15.—Bureau of weights and measures—Table showing work accomplished in each municipality by insular and municipal inspectors, respectively, according to daily and fortnightly reports.	116
Statement No. 16.—Bureau of supplies, printing, and transportation—Balance sheet June 30, 1918.	130
Statement No. 17.—Bureau of supplies, printing, and transportation—Supplementary statement of general ledger accounts, June 30, 1918.	130
Statement No. 18.—Bureau of supplies, printing, and transportation—Statement for fiscal year 1917-18.	131
Statement No. 19.—Bureau of supplies, printing, and transportation—Printing division fiscal year 1917-18.	132
Statement No. 20.—Bureau of supplies, printing, and transportation—Transportation division, fiscal year 1917-18.	133

## APPENDIX III.

Report of the commissioner of health.	135
Organization of the department of health of Porto Rico.	137
Report of the insular board of health.	140
Regulations prepared by the insular board of health and not acted upon by the former executive council and are now being reconsidered by the board.	141
Hospital or sanatorium for the tuberculous.	142
Leper colony.	142
Infantile mortality in Porto Rico.	142
Fiscal year 1916-17.	143
Fiscal year 1917-18.	143
Condensed milk—Analytical data.	145
Statement showing milk supply and sale of milk in Porto Rico.	146
Transmissible diseases.	148
Model report for the notification of transmissible diseases used by the department of health of Porto Rico.	148
Diseases which should be reported.	148
Malaria.	148
Statement or synopsis showing the antimalaria campaign and movement of patients in the malarial hospital established at Barceloneta.	151
Statement showing the expenses incurred in the hospital for malarial patients established at Barceloneta on Oct. 24, 1917, and closed Apr. 3, 1918.	154
Sanitation of Barceloneta.	154
Antimalaria dispensary at Salinas.	155
Streets in the town of Salinas where malarial cases were found.	155
Barrio "Aguirre," Poblado "Coqui"	156
Antimalaria dispensary at Patillas.	156
Mortality due to malaria on the island, 1912-1918.	157
Tuberculosis.	157
Uncinariasis.	160
Table A.—Number of uncinariasis treated monthly during the fiscal year 1918.	162
For original.	163
For original.	163
Table B.—Changes in typhoid fever, 1913-1918.	163
year ending June 30, 1918.	164

## Report of the commissioner of health—Continued.

## Organization of the department of health of Porto Rico—Continued.

	Page.
Residences.....	164
Leprosy.....	164
By sexes.....	164
By races.....	164
By ages.....	164
From.....	165
Senate committee on education, health, and charities.....	167
Estimate for the construction of a modern leprosy, including land, material, and labor.....	167
Tropical frambesia, pian, yaw, or ruba.....	168
Division of transmissible diseases and statistics.....	171
Measles.....	171
Tuberculosis.....	172
Malaria.....	172
Smallpox.....	173
Typhoid fever.....	173
Uncinaria.....	173
Diphtheria.....	173
Whooping cough.....	174
Infantile tetanus.....	174
Filaria.....	174
Other transmissible diseases.....	174
Birth rate.....	174
Marriages.....	174
General mortality rate.....	174
Diarrhea and enteritis.....	175
Diseases of the respiratory system.....	175
Transmissible diseases.....	175
Congenital debility.....	175
Quarantine hospital.....	176
Antituberculosis sanatorium.....	176
Lepor colony.....	176
Anemia service, showing the total number of new cases attended at the station, by color, sex, age, clinical form, and result obtained during the fiscal year 1917-18.....	176
Synopsis of work done in the pathological laboratory of the department of health in cooperation with the commission on study and investigation annexed thereto.....	194
Examinations.....	194
Biological laboratory.....	195
Table showing the total number and kind of analyses made in this laboratory during the fiscal year ending June 30, 1918.....	197
Examination of rats during the fiscal year ending June 30, 1918.....	199
Total of examinations.....	199
Annual report of the director of the chemical laboratory, R. Del Valle Sarraga.....	200
Table No. 1.—Work performed during the fiscal year 1917-18, classifying the samples as to quality.....	201
Table No. 2.—Source of food and drugs and number of samples examined.....	202
Table No. 3.—Source and classification of samples of cow's milk, 1917-18.....	203
Table No. 4.—Classification of cases recommended for prosecution..	203
Division of sanitary engineering.....	204
Medical topography.....	206
Building and other plans approved by the division of sanitary engineering for the year ending June 30, 1918.....	211
Report of the medical inspector of the northern district.....	212
San Juan.....	212
Fajardo.....	213
Arecibo.....	213
Mayaguez.....	213
Report of the medical inspector of the southern district.....	213

Report of the commissioner of health—Continued.	
Annual reports of the respective local health officers, food and drug inspectors, and veterinary inspectors.	Page. 215
San Juan.	215
Ponce.	216
Mayaguez.	217
Arecibo.	219
Humacao.	219
Aguadilla.	220
Transmissible diseases during the year.	222
Vega Baja.	225
Annual statistics of cases treated at the anemia station, 1,264.	227
Latrines constructed in the rural districts of Vega Baja.	227
Fajardo.	227
Yauco.	228
Complaints filed in court.	228
Transmissible diseases.	228
Anemia station.	229
Isabela.	229
Transmissible diseases.	229
Specimens of blood and sputum sent to the laboratory.	229
Juana Diaz.	229
Arroyo.	230
Ciales.	230
Guanica.	230
Patillas.	231
Food and drug inspectors.	231
Northern district.	231
Andres Rodriguez.	231
Southern district.	232
Veterinary inspection.	232
Northern district.	232
Southern district.	232
Blind asylum—annual report of the manager.	233
Report of the oculist-physician.	233
Comparative statement showing the number of patients admitted to the insane asylum during the fiscal years 1916-17 and 1917-18.	234
Statement showing patients discharged each month during the fiscal year 1917-18.	234
Number of patients in the blind asylum at Ponce showing the towns from which admitted and their curable or incurable condition.	235
List of all patient admissions and discharges, cured and not cured, and deaths, from July 1, 1917, to June 30, 1918.	235
Diagnoses of the patients admitted to the blind asylum, curable and incurable, during the fiscal year 1917-18.	236
Operations performed in the blind asylum during the fiscal year 1917-18.	236
Intercurrent diseases.	236
Deaths.	236
Annual report of the superintendent of the insane asylum.	237
Age, color, and civil condition of patients remaining in the insane asylum on June 30, 1918.	239
Occupations of patients remaining in the insane asylum on June 30, 1918.	240
Age of patients discharged and cause of discharge during the fiscal year 1917-18.	240
Diagnoses of mental diseases of the patients discharged and cause of discharge during the fiscal year 1917-18.	241
Mental diseases of patients remaining in the insane asylum on June 30, 1918.	241
Diseases which caused the death of patients according to psychoses during the fiscal year 1917-18.	242
Surgical operations performed on patients during the fiscal year 1917-18.	242
Comparative statement showing the number of patients admitted to the insane asylum during the fiscal years 1916-17 and 1917-18.	243
Statement showing patients discharged each month and the cause therefor during the fiscal year 1917-18.	243

Report of the commissioner of health—Continued.	Page.
Annual reports of the superintendents of the boys' and girls' charity schools.	243
Degree of instruction of children admitted.....	244
Age of the inmates.....	244
Enrollment and degree of efficiency of educational work.....	244
Status of inmates upon leaving the school in the boys' charity school..	244
Girls' charity school.....	245
Manual training—boys' charity school.....	245
Manual training—girls' charity school.....	246
Cooperation rendered by the inmates of the charity schools in connection with the conflict created by the European war.....	247
Admission of children in the schools.....	247
Report of visiting physician.....	248
For the boys' and girls' charity schools.....	248
Statement showing amounts expended by the department of health from January 1, 1918, to June 30, 1918, and the balances July 1, 1918.....	249
Recapitulation of the two budgets.....	256
Proposed budget for the biennial 1919-1921.....	259

APPENDIX IV.

Report of the auditor, and consolidated financial exhibits.....	263
System of auditing and accounting.....	263
Appropriations authorized at the first regular and extraordinary sessions of the Ninth Legislature of Porto Rico, which have not been set up on the books of the auditor.....	264
Financial exhibits.....	266
Division of general accounts.....	268
Division of disbursements and claims.....	268
Division of audits.....	269
Table No. 1.—Statement of receipts of the various municipalities of Porto Rico for the fiscal year ending June 30, 1918.....	270
Table No. 2.—Statement of disbursements of the various municipalities of Porto Rico for the fiscal year ending June 30, 1918.....	272
Table No. 3.—Statement of unexpendable property owned by the municipalities of Porto Rico as of June 30, 1918.....	274
Table No. 4.—Statement of receipts and disbursements of the various school boards of Porto Rico for the fiscal year ending June 30, 1918..	276
Table No. 5.—Statement of unexpendable property owned by the school boards of Porto Rico as of June 30, 1918.....	278
Division of examinations.....	279
Division of property accounts.....	281
Table No. 6.—Balances of property returns as of June 30, 1918.....	281
Office force.....	282
Consolidated financial exhibits.....	283
Exhibit No. 1.—Statement of assets and liabilities as of June 30, 1918.....	283
Exhibit No. 2.—Account of the people of Porto Rico for the fiscal year ending June 30, 1918.....	284
Exhibit No. 3.—Income account for the year ending June 30, 1918.....	284
Exhibit No. 4.—Comparative statement of accrued insular revenues for the fiscal years ending June 30, 1918, and June 30, 1917.....	284
Exhibit No. 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917.....	285
Exhibit No. 6.—Loans to municipalities as of June 30, 1918.....	296
Exhibit No. 7.—Loans to school boards as of June 30, 1918.....	296
Exhibit No. 8.—Loans from school building fund; amounts due from school boards for construction of school buildings under acts of the legislative assembly approved Mar. 14, 1907, and Mar. 9, 1908.....	297
Exhibit No. 9 (Part I).—Municipal and school board bonds pending execution and delivery to treasurer of Porto Rico June 30, 1918, and their redemption funds.....	298
Exhibit No. 9 (Part II).—Municipal and school board bonds executed and delivered to treasurer of Porto Rico on June 30, 1918, and their redemption funds.....	300
Exhibit No. 10.—Road construction in Porto Rico.....	302

## Report of the auditor, and consolidated financial exhibits—Continued.

Exhibit No. 11.—Statement showing the location by municipalities and valuation of real estate owned by the insular government as of June 30, 1918.	Page. 304
Exhibit No. 12.—Statement showing locations and valuations of public buildings, exclusive of real estate, owned by the insular government, as of June 30, 1918.	305
Exhibit No. 13.—Statement of accrued trust fund liabilities, as of June 30, 1918.	307
Exhibit No. 14.—Interest-bearing indebtedness of the insular government, June 30, 1918—Bond issues.	312
Exhibit No. 15.—University of Porto Rico—Balance sheet, June 30, 1918.	313
Exhibit No. 16.—University of Porto Rico—Surplus account, June 30, 1918.	313
Exhibit No. 17.—University of Porto Rico—Statement of additions to capital accounts for the period from July 1, 1917, to June 30, 1918.	315
Exhibit No. 18.—University of Porto Rico—Amended balance sheet, June 30, 1918.	316
Exhibit No. 19.—Statement showing the amount of taxes pending on June 30, 1918, for fiscal years 1901-2 to 1917-18, percentage, and reasons why they are pending.	317
Exhibit No. 19-A.—Property valuation and taxes for the fiscal year 1917-18, on June 30, 1918.	321
Exhibit No. 19-B.—Statement showing distribution of property tax collections for the years ending June 30, 1918, and June 30, 1917.	324
Exhibit No. 20.—Receipts and disbursements of the insular government for the fiscal year ending June 30, 1918.	325
Exhibit No. 20-A.—Comparative statement of excise stamp sales detailed by sources, fiscal years 1915-16, 1916-17, 1917-18.	325
Exhibit No. 21.—Funds of the insular government June 30, 1918.	327
Exhibit No. 22.—Statement of cash receipts during the year ending June 30, 1918.	328
Exhibit No. 23.—Repayment receipts, detailed, fiscal year ending June 30, 1918.	329
Exhibit No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918.	330
Exhibit No. 25.—Recapitulation by departments.	355
Exhibit No. 26.—Recapitulation by fiscal years.	356
Exhibit No. 27.—Insular revenues—Statement of cash receipts and disbursements, from July 1, 1913, to June 30, 1918, by years.	357
Exhibit No. 28.—Statement of receipts and disbursements from July 1, 1913, to June 30, 1918, by years.	360
Exhibit No. 29.—Estimated insular revenue cash income, appropriation assets, and appropriations for the fiscal year ending June 30, 1919.	364
Exhibit No. 30.—Expenditures for maintenance of insular roads during the fiscal year ending June 30, 1918.	365
Exhibit No. 31.—Cost of road maintenance.	367
Exhibit No. 32.—Collections at the several ports of the island during the fiscal year 1917-18.	368
Exhibit No. 33.—Total cash receipts and expenditures, insular telegraph, for the year ended June 30, 1918.	369
Exhibit No. 34.—Statement by stations, showing receipts and operating expenses, bureau of insular telegraph, for the year ending June 30, 1918.	370
Exhibit No. 35.—Porto Rico irrigation service, financial statement, June 30, 1918.	372
Exhibit No. 36.—General balance sheet, summary of accounts to June 30, 1918.	373
Exhibit No. 37.—Statement of net charges of features during fiscal year July 1, 1917-June 30, 1918.	375

## APPENDIX V.

Report of the treasurer.	377
Introductory remarks—reorganization of personnel.	377
Bureau of accounts and of the paymaster.	378
Bureau of property taxes.	384
Bureau of excise taxes.	387

# CONTENTS.

xi

Report of the treasurer—Continued.	Page.
Bureau of municipal finance.....	389
Closing remarks—Table No. 1.—Estimate of insular revenue cash receipts for year ending June 30, 1919.....	393
Table No. 2.—Consolidated report of organized banks in operation in Porto Rico at the close of business June 30, 1918.....	394
Table No. 3.—Transactions in Porto Rico by insurance companies in the calendar year 1917.....	398
Table No. 4.—Total assessed value of real and personal property, by municipalities, for the fiscal year 1917-18.....	401
Table No. 5.—Tabulation of assessed value of real property, by municipalities and classes.....	402
Table No. 6.—Number of acres, by municipalities and classes, for the fiscal year 1917-18.....	406
Table No. 7.—Average value per acre, by municipalities and classes, for the fiscal year 1917-18.....	408
Table No. 8.—Total assessed value of personal property, by municipalities and classes, for the fiscal year 1917-18.....	410
Table No. 9.—Number of heads of live stock and vehicles and average value per unit.....	412
Table No. 10.—Report, by nationality, of all the real estate used for the purposes of agriculture, and held, either directly or indirectly, by corporations, partnerships, or individuals in holdings in excess of 500 acres in Porto Rico.....	414
Table No. 11.—Statement of income tax levied on individuals and corporations, Feb. 13, 1918, to June 30, 1918.....	415
Table No. 12.—Comparative statement showing sources of excise taxation in Porto Rico, the quantity of merchandise, in the case of specific, and the value thereof in the case of ad valorem, tax levied, tax paid during the past four fiscal years, and the amount of such tax collected, including licenses and miscellaneous.....	416
Table No. 13.—Average number of licenses issued during the past six fiscal years, with revenue received therefrom.....	417
Table No. 14.—Taxable articles exported from Porto Rico during the past five fiscal years free of tax.....	418
Table No. 15.—Statement of leaf tobacco grown and imported into Porto Rico, and of exportation of leaf tobacco and elaboration of cigars for exportation and consumption in Porto Rico during the fiscal year ending June 30, 1918.....	418
Table No. 16.—Detailed expenditures of municipalities, fiscal year 1917-18.....	420
Table No. 17.—Comparative statement of receipts of all municipalities in 1916-17 and 1917-18.....	422
Table No. 18.—Gross receipts of municipalities, detailed by sources and destination, fiscal year 1917-18.....	423
Table No. 19.—Outstanding indebtedness, detailed by municipalities, June 30, 1918.....	424

## APPENDIX VI.

Report of the commissioner of the interior.....	425
Bureau of public works.....	425
Construction of roads and bridges.....	427
Expenditures from road-bond fund of \$2,000,000, act of 1916.....	428
Alto Bandera-Jayuya.....	429
Arecibo-Lares Road.....	429
Yauco-Lares Road.....	430
Las Piedras-San Lorenzo Road.....	430
Corozal-Barros Road.....	431
Mayaguez-Maricao via Las Vegas.....	431
Ciales-Juana Diaz Road.....	432
Lares Ajuntas Road.....	432
Corozal-Morovis Road.....	433
Bayamon-Toa Alta Road.....	433
Vieques Island Road.....	433
Martin Pena-Bayamon Road.....	434
Bridges on the Ponce-Guayama Road.....	434
Bridge over Cano Guatemala on the Aguadilla-Lares Road.....	435

## Report of the commissioner of the interior—Continued.

	Page.
Construction of roads and bridges—Continued.	
Portugues River Bridge.....	435
Bridge over Vegas River, Yauco-Lares Road.....	435
Bridges on the Yabucoa-Humacao Road.....	435
Bridges on the Fajardo-Ceiba Road.....	436
Other bridges and culverts.....	436
Miscellaneous expenditures.....	436
The \$2,000,000 bond issue.....	436
Appropriations recently made by the legislature providing for certain construction.....	438
Grading of grounds known as El Escambron.....	439
Maintenance and repairs of roads and bridges.....	440
Organization and personnel.....	440
Purchase and placing of stone for repairing macadam.....	441
General cleaning and removal of landslides.....	443
Road menders' work.....	443
Purchase and repairs of equipment.....	443
Construction, rebuilding, and repairs of bridges and culverts.....	444
Retaining and protection walls.....	445
Repairs to road houses.....	445
Purchase and spreading of bituminous material.....	446
Field supervision and inspection.....	446
General expenses.....	446
Total expenditure for and cost of road maintenance.....	447
Recommendations.....	447
Construction and maintenance of municipal roads.....	448
Surveys and projects for new roads.....	449
Division of public buildings.....	453
Personnel.....	453
Materials and construction.....	454
Factors tending to retard construction.....	455
Work by administration.....	455
Work under contract.....	456
Work completed.....	458
Recommendations.....	459
Completed projects of work to be undertaken.....	461
Municipal works and improvements.....	462
Personnel.....	462
Factors tending to retard construction.....	462
Work done during fiscal year.....	463
Waterworks.....	463
Sewers.....	464
Pavements.....	464
Electric light system.....	464
Expenditures.....	464
Public lands.....	465
Personnel.....	465
Expenditures.....	465
Surveys of land.....	466
Recommendations.....	468
The insular telegraph and telephone bureau.....	469
Work done during the fiscal year.....	470
Receipts and expenditures.....	471
Interchange of telephone messages.....	472
Recommendations.....	472
Harbors and docks.....	473
Comparison of shipping with previous year.....	473
Receipts and expenditures.....	474
Ponce municipal dock.....	474
San Juan water front.....	474
Dredging San Juan Harbor.....	474
Recommendations.....	474
San Juan harbor improvements.....	475
Work done during the year.....	476
Operation of the bulkhead.....	476
Work under consideration.....	477

Report of the commissioner of the interior—Continued.	Page.
New irrigation projects.....	477
Appendix No. 1.—Tabulation showing the rainfall by months for the fiscal year ending June 30, 1918, and the monthly normals for the period covered by the irrigation service records, showing also totals for the fiscal year ending June 30, 1917.....	494
Appendix No. 2-A.—Tabulation showing run-off in acre-feet of the streams entering Patillas Reservoir.....	495
Appendix No. 2-B.—Tabulation showing run-off in acre-feet of the streams entering Carite Reservoir.....	495
Appendix No. 2-C.—Tabulation showing run-off in acre-feet of the streams entering Coamo Reservoir.....	496
Appendix No. 2-D.—Tabulation showing run-off in acre-feet of the streams entering Guayabal Reservoir.....	496
Appendix No. 3.—Acreage selected by the irrigation commission for inclusion in the permanent irrigation district.....	497
Appendix No. 4.—Table showing the amount of water actually delivered each month and the amount offered but not accepted.....	497
Appendix No. 5.—Carite water power.....	498
Appendix No. 6.—Porto Rico irrigation service—Recapitulation of service record of employees, from July 1, 1917, to June 30, 1918....	498
Appendix No. 7.—Employees of the Porto Rico irrigation service as of June 30, 1918.....	498
Disbursements and accounts.....	499
Franchises, privileges, and concessions.....	501
Personnel.....	501
Conclusion.....	501

APPENDIX VII.

Report of the commissioner of education.....	507
Introductory survey.....	507
School allotment—Urban versus rural schools.....	508
Rural education.....	510
Consolidated rural schools.....	511
Graded schools.....	511
High and continuation schools.....	512
War work of the schools.....	512
The food question.....	512
Cooperation with the Porto Rico food commission.....	513
Food-conservation week.....	513
Agricultural and patriotic propaganda.....	513
War literature and patriotic instruction.....	514
Agricultural committees.....	514
Parents' association.....	514
Rural conferences.....	514
Work in home economics.....	516
Extension work in home economics.....	517
Sewing.....	518
Work in manual arts.....	518
Junior Red Cross drive.....	518
American Red Cross.....	520
Liberty loan campaigns.....	520
School men in military service.....	520
Native industries.....	520
School libraries.....	521
School lunches.....	522
Department publications.....	523
Teachers' meetings and institutes.....	523
Professional reading courses.....	524
Rating of teachers.....	524
Legislation.....	525
Rules and regulations.....	525
School-board activities.....	526
Summarized statement of school buildings and sites.....	527
Recommendations.....	527
Table I.—Directing and supervising officers, 1917-18.....	528



Report of the commissioner of education—Continued.	Page.
Table II.—Summary of statistics for the school year 1917-18.....	528
Table III.—Enrollment, number belonging, attendance, and percentage of attendance for the island and municipalities.....	530
Table IV.—Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities.....	535
Table V.—Estimated population, population of school age, and population of compulsory school age compared with the total enrollment.....	544
Table VI.—Report on school buildings.....	545
Table VII.—Distribution by grade, age, and sex of pupils enrolled during the year 1917-18.....	546
Table VIII.—Private schools of Porto Rico.....	549
Table IX.—Expenditures for educational purposes and per capita costs, years ending June, 1899 to 1918.....	549
Table X.—Financial tables.....	552
Table XI.—School board finances—Receipts and expenditures, 1917-18...	555
Table XII.—School board finances—Expenditures classified, 1917-18.....	557
Table XIII.—Receipts and expenditures.....	558
Table XIV.—School and home gardens.....	559
Table XV.—Community and war propaganda.....	560
Report of the president of the board of trustees and chancellor of the University of Porto Rico.....	561
Rio Piedras departments.....	561
College of Agriculture and Mechanic Arts.....	562
Report of the president of the board of trustees of the Carnegie Library..	563
Statement of expenditures.....	564

## APPENDIX VIII.

Report of the Attorney General.....	565
War activities of the department of justice of Porto Rico.....	566
Reorganization of the government of Porto Rico under the new organic act.....	568
Important litigation.....	568
Rejection of citizenship.....	569
Prohibition law.....	570
Juvenile courts.....	571
The reform school.....	572
Supreme court.....	572
District courts.....	572
Municipal courts.....	572
Registries of property.....	573
Penal institutions.....	573
Irrigation appeals.....	573
Russell & Co. v. Henna et al.....	574
Compañía de Los Ferrocarriles de Puerto Rico v. The Treasurer of Porto Rico.....	574
Mandamus cases against public officials.....	575
Municipality of Quebradillas v. The Executive Secretary of Porto Rico..	575
Juan Francisco Pacheco et al. v. District Judge of Humacao.....	575
Santiago Iglesias v. The Executive Council.....	576
Herminio Diaz Navarro v. The Attorney General of Porto Rico.....	576
The School Board of Cidra v. The Commissioner of Education.....	576
Civil-service cases.....	577
The Muratti and Tapia cases.....	577
Taxation cases.....	579
West India and Panama Telegraph Co. (Ltd.) and Compagnie Francaise des Cables Telegraphiques v. the Public Service Commission, and the Attorney General of Porto Rico.....	579
Tuberculosis hospital case—H. H. Scoville et al. v. Alejandro Ruiz Soler et al.....	581
The people of Porto Rico v. American Railroad Co.....	581
The people of Porto Rico v. American Surety Co.....	582
Opinions of the Attorney General of Porto Rico and recommendations....	582
Table 1.—Statement showing work of supreme court for fiscal year 1917-18.	583
Table 2.—Criminal cases tried in the district courts during the fiscal year 1917-18.....	583

## Report of the attorney general—Continued.

Table 3.—Cases of homicide tried in the district courts during the fiscal year 1917-18.....	Page 584
Table 4.—Jury trials in the district courts during the fiscal year 1917-18..	585
Table 5.—Felony cases tried in the district courts without jury during the fiscal year 1917-18.....	585
Table 6.—Cases of misdemeanor tried originally in the district courts during the fiscal year 1917-18.....	585
Table 7.—Criminal cases tried in the district courts during the fiscal year 1917-18.....	585
Table 8.—Comparative statement of totals showing record of criminal cases in the district courts for five years.....	586
Table 9.—Appeals from municipal and peace courts decided in each district court during the fiscal year 1917-18.....	586
Table 10.—Complaints handled in fiscalias during the fiscal year 1917-19..	586
Table 11.—Civil cases tried in the district courts during the fiscal year 1917-18.....	587
Table 12.—Criminal cases tried in the municipal courts during the fiscal year 1917-18.....	587
Table 13.—Civil cases tried in the municipal courts during the fiscal year 1917-18.....	588
Table 14.—Criminal cases tried in the peace courts during the fiscal year 1917-18.....	589
Table 15.—Cases of prohibited weapons tried in the district courts during the fiscal year 1917-18.....	590
Table 16.—Cases of prohibited weapons tried in the municipal courts during the fiscal year 1917-18.....	591
Table 17.—Cases of prohibited weapons tried in the justice of the peace courts during the fiscal year 1917-18.....	592
Table 18.—Registries of property, fiscal year 1917-18.....	593
Table 19.—Registries of property, agricultural loans, fiscal year 1917-18...	594
Table 20.—Commercial registries, fiscal year 1917-18.....	594
Table 21.—Cases in which reports were made by the Attorney General upon applications for clemency during the fiscal year 1917-18, and those pending June 30, 1918.....	594
Table 22.—Civil cases in which the people of Porto Rico had an interest and in which there have been decisions during the fiscal year.....	596
Table 23.—Civil cases in which the people of Porto Rico has an interest still in litigation at the close of the fiscal year.....	600
Table 24.—Statement showing the number of prisoners and number of sick in the penal institutions and inmates in the reform school, fiscal year 1917-18.....	604
Table 25.—Statement showing terms of sentence of prisoners confined in the penal institutions and inmates in the reform school on June 30, 1918.....	604
Table 26.—Number of commitments of prisoners in the penal institutions and inmates in the reform school on June 30, 1918.....	605
Table 27.—Classification, by age, of number of prisoners when convicted, in the penal institutions and inmates in the reform school on June 30, 1918.....	605
Table 28.—Grand total of prisoners on June 30, 1918.....	605
Table 29.—Classification, by nationality, of prisoners confined in the penal institutions and inmates in the reform school on June 30, 1918.....	605
Table 30.—Different classifications of prisoners confined in the penal institutions and inmates in the reform school on June 30, 1918.....	606
Table 31.—Statement showing occupations of prisoners when convicted and confined in the penal institutions and inmates in the reform school on June 30, 1918.....	607
Table 32.—Summary of offenses on June 30, 1918.....	608
Table 33.—Classification of prisoners in the penal institutions and inmates in the reform school, by judicial districts, on June 30, 1918, and percentage in relation to the total population of Porto Rico.....	608
Table 34.—Principal offenses for which prisoners have been sentenced, by calendar year, on and after 1887.....	609
Table 35.—Average number of prisoners in the penal institutions and inmates in the reform school.....	609
Table 36.—Number of prisoners in the penal institutions and inmates in the reform school on June 30, 1918, from the different cities of Porto Rico..	610

## Report of the attorney general—Continued.

Table 37.—Number of days' work performed by prisoners employed on the insular highways during the fiscal year 1917-18.....	Page. 611
Table 38.—Number of days' work performed by prisoners of the penitentiary and district jails in the cleaning of Government offices and moving of office furniture, etc., during fiscal year 1917-18.....	611
Table 39.—Table showing the ages of the children brought before the juvenile courts.....	611
Table 40.—Table showing the school attendance and education of the children brought before the juvenile courts.....	612
Table 41.—Table showing the legitimacy of the children brought before the juvenile courts.....	612
Table 42.—Table showing the color of the children brought before the juvenile courts.....	612
Table 43.—Table showing the persons with whom the children were living when they were brought before the juvenile courts.....	612
Table 44.—Table showing the persons who presented petitions alleging that the children were delinquent or abandoned before the juvenile courts.....	613
Table 45.—Table showing the crimes imputed or committed by the children brought before the juvenile courts.....	613
Table 46.—Resolutions of the juvenile courts.....	613
Table 47.—Table showing the persons in whose charge the children were placed by the juvenile courts.....	613
Table 48.—Change in the personnel of officers of the department of justice during fiscal year 1917-18.....	614
Exhibit No. 49.—Organizing grand juries.....	615
Exhibit No. 50.—Organization of grand juries.....	617
Exhibit No. 51.—To the judges and district attorneys of Porto Rico.....	618
Exhibit No. 52.—In re marriages of men called in the draft.....	619

## APPENDIX IX.

Report of the commissioner of agriculture and labor.....	621
Agriculture.....	621
Municipal boards of agriculture.....	621
Forest service.....	621
Agronomic division of the island.....	622
Cadastral topographic plan of Porto Rico.....	623
Review of agriculture.....	623
Insular experiment station.....	623
Labor.....	629
Labor conditions in the island.....	629
Labor disputes.....	630
Enforcement of labor laws.....	630
Publications.....	631
Free employment agency.....	631
Recommendations.....	631
Table showing strikes from July 1, 1917, to June 30, 1918.....	632
Table showing inspections made of industrial establishments from July 1, 1917, to June 30, 1918.....	633
Table showing four types of salaries that prevailed in agricultural work in sugar-cane zone during crop season, 1918.....	641
Table showing the work accomplished in connection with the scaffold law from July 1, 1917, to June 30, 1918.....	641
Table showing investigations made in connection with the workman's compensation act from July 1, 1917, to June 30, 1918.....	642
Statistical data of the free employment agency for the fiscal year 1917-18..	643
Number of applicants for the different occupations.....	643
Table showing the work done in connection with the women and children law from July 1, 1917, to June 30, 1918.....	644
Industrial statistics of Porto Rico as per investigations made by officials of the bureau of labor, during April, May, and June, 1918.....	646
Summary.....	649

APPENDIX X.

	Page.
Report of the food commission.....	651
Commercial transactions.....	652
Finances.....	655
Agricultural propaganda.....	656
Market division.....	657
Experimental farm.....	658
Publicity.....	658
Fuel.....	658
United States Food Administration.....	659
Office building.....	660
Regulation.....	661
Exports.....	661
Rice, flour, and condensed milk.....	661
Fresh milk.....	662
Bread.....	664
Wheatless days.....	665
Meat.....	666
Meatless days.....	668
Salt fish.....	668
Fresh fish.....	668
Corn and corn meal.....	668
List of prices.....	668
Sugar.....	669
Sinking of steamship <i>Carolina</i> .....	669
Gasoline and kerosene.....	670
Price control.....	671
Enforcement.....	671
Fisheries.....	671
Personnel.....	671
Porto Rico producers' committee.....	672
Poultry and eggs.....	673
Nitrate of soda.....	673
Cooperation.....	673
The press.....	674
The insular police.....	674
The courts of justice.....	674
The trade.....	674
The labor organizations.....	675
Religious organizations.....	676
The Masonic organizations.....	676
The department of education and public schools.....	676
The governor.....	676
Bureau of Insular Affairs.....	676
Resident Commissioner for Porto Rico at Washington.....	676
Auditor of Porto Rico.....	676
Collector of customs.....	677
Banks in Porto Rico.....	677
Treasurer of Porto Rico.....	677
The ex-president of the food commission.....	677
Actual results.....	677
Comments on audit.....	678
Work done.....	678
Report of the auditor.....	678
Schedule B-1.—List of outstanding checks in Banco Comercial de Puerto Rico as of Apr. 30, 1918.....	680
Schedule C.—Statement of cash on hand in Banco Territorial y Agrícola de Puerto Rico.....	681
Schedule D.—Statement of cash on hand in the Royal Bank of Canada.....	681
Schedule E.—Statement of cash on hand in the National City Bank, New York.....	681
Schedule F.—Statement of cash on hand in the Wells Fargo National Bank, San Francisco, Cal.....	682
Exhibits.....	682
Report of the committee on agriculture.....	685
Table 1.—Acreage of food crops planted before Sept. 15, 1917.....	694

## Report of the food commission—Continued.

Table 2.—Agents, agricultural committees, meetings, gardens, acreage, and seeds sold on credit.....	Page. 696
Table 3.—Acreage of food crops planted from Sept. 15, 1917, to Apr. 30, 1918.....	698
Table 4.—Coconuts, bananas, plantains, statistics, June, 1918.....	700
Table 5.—Live-stock statistics taken in January, 1918.....	702
Table I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918.....	704
Table II.—Foodstuffs imported from foreign countries into Porto Rico May, 1916, to April, 1917.....	714
Table III.—Foodstuffs imported from foreign countries into Porto Rico, May, 1917, to April, 1918.....	716
Table IV.—Foodstuffs exported from Porto Rico to United States.....	718
Table V.—Foodstuffs exported to United States, May, 1917, to April, 1918.....	719
Table VI.—Foodstuffs exported to foreign countries, May, 1916, to April, 1917.....	720
Table VII.—Foodstuffs exported to foreign countries, May, 1917, to April, 1918.....	723
Table VIII.—Statement of fruit shipments from Porto Rico to continental United States, July 1, 1917, to June 30, 1918.....	726
Table IX.—Detail of fruit shipments from Porto Rico to continental United States on allotments made by Porto Rico Producers' Committee (fruit section), Jan. 30 to June 30, 1918.....	727
Table X.—Comparative retail prices for continental United States and Porto Rico from July, 1917, to June, 1918.....	728
Table XI.—Average retail prices of local produce and of similar imported articles into Porto Rico from July, 1917, to June, 1918, based on reports received from the 76 towns in the island.....	730
Resolutions.....	732

# EIGHTEENTH ANNUAL REPORT OF THE GOVERNOR OF PORTO RICO.

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GOVERNMENT HOUSE,  
*San Juan, Porto Rico, October 6, 1918.*

SIR: Pursuant to law, I have the honor to submit the following report of the Governor of Porto Rico covering the fiscal year ended June 30, 1918.

## INTRODUCTION.

The year covered by this my fifth annual report as Governor of Porto Rico has proved to be probably the most eventful and important year in the whole history of the island, not even excepting the previous year with all of its epochal changes. It was not only the first full fiscal year that has elapsed since the entry of the United States into the great world war, but it was also the first complete year of operation under the new organic act. It has therefore been filled with great and stirring events and crowded with many forms of war work, and with many sorts of political activities to which the people of the island had not been heretofore accustomed. To all these calls upon their patriotic and political impulses the people of the island as a whole have responded as loyally and as cheerfully as could reasonably have been expected. There have come up many important and difficult problems for solution and many unexpected obstacles have been met in carrying on the actual operations of the war and the government; and all of these difficulties had to be overcome without the aid of established precedents and of previous experience on the part of the people. Nevertheless, the work has been accomplished, and, taken as a whole, the people and the government of the island have good reason to be unashamed of the record.

In the field of political activity the first election under the new organic act took place July 16, 1917, and passed off in an orderly manner after a spirited campaign. At this election not only was a new legislature chosen, but the prohibition amendment of the new organic act was submitted to a vote of the people and was ratified by a large majority—some 38,000 majority in a total vote of about 160,000. This meant that prohibition of all alcoholic beverages must be put into effect on March 2, 1918, and of course involved radical increase in local taxation to support the government in substitution of the taxes that would be lost through prohibition. The first session of the new legislature, consisting of a house of representatives and a senate, both elected by the people, met on August 13, 1917, and the occasion was marked by widespread interest throughout the island. The session lasted for about 100 days and was, upon the whole, a

successful lawmaking body. In addition to the budget for two fiscal years, all of the necessary revenue measures were passed and much other really important legislation was perfected and enacted into laws. Owing to the changes in the government made necessary by the new constitution, more than one hundred new appointments had to be made in the executive departments and all of them had to be approved by the new senate. Moreover, the enlarged veto powers of the governor had to be exercised in a new way owing to the abolition of the old executive council which constituted a connecting link between the executive and the legislative assembly under the old organic act. Owing to the lack of experience on the part of most of the members of the legislature in the actual working of a government of this sort, and owing to the many opportunities offered by this first session for a conflict of views, there arose some friction between the the executive and the legislative branches of the government which culminated in an effort on the part of the legislature to take a recess of two and one-half months, or until February 5, 1918, instead of adjourning sine die. This was done upon the theory that certain clauses of the organic act gave the legislature the power to take long recesses from time to time and practically hold itself in continuous session throughout the whole two years of its legal existence.

The governor, however, would not accept this interpretation of the law or agree that the legislature could recess in this manner or lawfully reassemble after having done so. However, after sober second thought, both parties to this controversy became more conciliatory and agreed to compromise most of the points in dispute so as to work together. The legislature met, pursuant to adjournment, on February 5, but took no action except to adjourn, and thereupon the governor called a special session which promptly assembled and finished up the work of the previous session, including confirmation by the senate of all of the appointments of the various officials.

The legislative work of these sessions is discussed more in detail elsewhere in this report.

The various forms of work necessary to the prosecution of the war have been carried on throughout the year, and almost everything else has been subordinated to this most essential matter. In contributions of their man power and financial resources, and in food production and conservation, the people of Porto Rico have shown a commendable spirit of patriotism and of cooperation in the winning of the war. In the matter of man power, Porto Rico has contributed freely of her young men to the needs of our great country in this supreme crisis. Volunteers came forward in large numbers to complete the Porto Rican regiment and raise it to war strength at the beginning of the war. During the last fiscal year two officers' training camps were formed in the island calling for 650 young men, and the best families cheerfully sent their sons to fill the ranks of these camps. Out of this number about 425 received commissions as officers. At this writing a third training camp of 600 student officers is in progress.

As stated in my report for 1916-17, the military registration took place on July 5, 1917, and on July 5, 1918, the registration of the class of 1918 was effected, adding about 10,000 to the lists and bringing the total number of registrants up to 121,241.

During the fiscal year a cantonment was built at San Juan where there are now undergoing training the first quota of some 12,000 men, the mobilization of which began at the close of the fiscal year, June

20. The exemption boards have already selected and are ready to deliver the second quota of 15,000 men as soon as the order for their mobilization is received.

This drain of men for the military service has already produced serious effects upon all departments of the public service and indeed upon private business organizations as well. The large departments of education and the insular police have felt with special severity the loss of their men to the army. While men are plentiful in Porto Rico, men of any considerable education are relatively scarce. Moreover, they are relatively quite young. A moment's reflection will show the reason for this.

The public schools of the island were founded by the American administration, and they have been operating in a large way only for some 10 or 15 years and of course only for those within the school age. Therefore, speaking of the masses of the Porto Rican people, practically all of the men over 31 years of age are illiterate—and indeed a very large per cent of those under that age. The drift of the young men, therefore, into the military service has been felt very keenly.

During the fiscal year the second and third Liberty loan campaigns were carried out with great spirit by the people of the whole island. The total subscriptions for these bonds were \$1,986,000 in the second and \$2,783,000 in the third campaign, making a grand total of \$4,769,000 for the two efforts. If we add to this the \$600,000 secured in the first campaign, it reaches a grand total of bonds subscribed in Porto Rico thus far of \$5,369,000. Considering that ordinary investments in this island usually yield 10 per cent interest, and all other conditions peculiar to the country, the people have made a good record in this vital matter.

A large part of the financial work connected with Liberty loan campaigns was intrusted to the treasurer of Porto Rico and his department, and they have performed this large task with patriotic zeal and marked efficiency.

The matter of war savings stamps also has not been neglected. A continuous movement for the sale of these stamps has been maintained under the leadership of the postmaster of San Juan, culminating recently in a special drive for a brief period and resulting in total sales of \$58,114.

In food conservation and production the excellent work inaugurated during the latter part of the previous year under the food commission has been steadily pushed with real enthusiasm and fine results. Under the wise and energetic leadership of the food commission the whole of the people have cooperated with real patriotism in this great work. There has been a very large increase in the production of foodstuffs in the island and a cheerful compliance with all the orders and regulations necessary to conserve the food supply for war purposes.

The other forms of war work have also been carried on by the local government and also by the people under various organizations. The Porto Rican chapter of the American Red Cross has developed its organization all over the island with local chapters in every municipality and some 50,000 members, all devoting themselves to the various activities of this great society. There is also in the schools a junior Red Cross organization, with a larger membership than the parent society. In the campaign for the second war fund of the



National Red Cross there was raised in Porto Rico more than \$100,000. In this connection I will state that Porto Rico's quota of the White House wool sent to the governor to be sold for the benefit of the Red Cross was disposed of on May 31, 1918, at a sale managed by the governor for \$4,000. This was the highest price received for this wool in the whole nation.

The Four Minute Men have effected an organization in most of the municipalities and are loyally supporting the Government in all of its war activities from dozens of platforms throughout Porto Rico. This organization has a special usefulness here where so many of the people are unable to read.

The local Y. M. C. A. is also very busy and efficient in conducting the war activities of that great organization, as is also true of the Knights of Columbus, the Womans League, the W. C. T. U., the Home Defense Society, and various other organizations for war work.

In fine, Porto Rico is at work in supporting the National Government and helping to win the war in every way open to her people.

The economic prosperity has in general continued upon nearly the same level as the previous year, although there has been considerable loss caused by a general and severe drought over most parts of the island lasting four or five months. It is generally believed that this will certainly reduce the sugar crop for next year very materially. Nevertheless, commercial business has been active and there was a general increase in wages in many parts of the island and in most lines of industry.

The external trade has reached a total of \$137,683,304, which is \$3,167,163 in excess of the record-breaking figures of the previous year.

An examination of the figures in detail reveals many disturbances and changes, most of which are plainly due to the influence of war conditions. In the first place the exports declined from almost \$81,000,000 in 1917 to \$74,294,022 in 1918. This decline of \$6,676,895 is more than accounted for by the difficulties and delays encountered in the transportation of sugar to the United States. The amount of sugar awaiting transportation at the end of the fiscal year was probably 100,000 tons in excess of the normal hang over, and this would have increased the exports by some \$15,000,000 if it had been possible to ship it with the usual promptness. This explains the decline in exports to the United States and also in part the reduction in exports of sugar. Notwithstanding this fact, the total trade with continental United States increased slightly over that of last year. On the other hand there was an increase of nearly \$10,000,000 in the total value of imports, reaching the unprecedented figure of \$63,389,782. This was due chiefly to the higher prices of the articles imported. In spite of this, however, there was still a balance of trade in favor of the island of \$10,904,740.

In the exportation of articles other than sugar there was another notable increase of nearly \$7,000,000, going up from about \$26,000,000 last year to \$32,983,177 for the year just closed. This is the highest figure ever reached; but practically the whole of the increase was in the items of cigars, cigarettes, and tobacco, the total exports of which reached the unprecedented level of \$16,142,555.

In spite of the decline in exports of sugar to the United States, due to delays in transportation, the percentage of all the external trade

that was effected with the continent remained about the same as the previous year, namely, 91 per cent.

The internal business of the island seems to be in a general state of healthy prosperity, although abnormal in many respects due to war conditions. During the year 32 new domestic corporations with a paid-in capital of \$116,600 were organized and authorized to transact business. This is 12 more than the previous year. During the same period 7 foreign corporations with a total paid-in capital of \$27,498,000 were registered and authorized to transact business of various kinds.

The banking situation, as shown by the consolidated bank statement published elsewhere in this report, seems to be safe, progressive, and sound. Two new banks were organized and opened for business during the fiscal year, the Bank of Ponce, with a paid-up capital of \$250,000, and a branch of the National City Bank of New York. The aggregate deposits in the 13 recognized banking institutions showed an increase of nearly \$1,000,000 over the figures of the previous year, which were the highest ever recorded. There was an increase of \$6,369,596 in loans, indicating a larger demand for money on first-class security for the transaction of domestic business. At the same time the cash reserve held in the vaults of the banks seemed sufficient for all contingencies. The funds for extending the loans were secured by reducing the balances in outside banks, by lowering somewhat the cash reserves, and by using the increased deposits.

The bureau of supplies, printing, and transportation increased its business in a notable manner during the year. The total business handled was \$1,822,161, an increase of \$517,121 over that of the previous year. The increase was fairly divided between sales and purchases, and the operating cost of handling this large business was a little more than 1.86 per cent. Eighty per cent of the total purchases were made from merchants in Porto Rico.

The new department of agriculture is at present working in cooperation with the Food Commission and the department of education in the campaign for food production. Owing to the exigencies of war and the peculiarly dependent position of the island upon outside sources for its food supply, this movement to increase local food production was placed in the foreground of the year's work in this department. As stated elsewhere, the amount of foodstuffs of various sorts produced locally has been very greatly increased, although in many parts of the island the crops of vegetables, etc., were seriously injured by the severe drought.

Local boards of agriculture have been appointed all over the island, and in addition the island has been divided into 10 agronomic districts and divisions, each to be in charge of a skilled inspector or assistant inspector to aid in the development of better farming. A forestry service was established by a law approved November 22, 1918, and a proclamation issued by the governor May 28, 1918, setting apart as insular forests all the mangrove swamps on the coasts of Porto Rico and adjacent islands belonging to the local government. This service will be carried on with the closest cooperation with that of the Federal Government, and additions will be made to the forests from time to time.

The work of the department of education has suffered grievously on account of the drain upon its personnel caused by the military

service. An unprecedented number of changes had to be made in its teaching force due to this and other conditions caused by the war. A large number of the best teachers and supervisors joined the colors during the year, and the difficulty of securing substitutes both here and on the continent was much increased by the low salaries fixed in the law for teachers. Nevertheless the department not only overcame as far as it was possible these unusual difficulties, but also patriotically performed a large amount of war work. Because of its relation to the food-production campaign, special stress was laid upon the teaching of agriculture, and many hundreds of school gardens were established, as well as 26,693 home gardens. In cooperation with the Food Commission 35 supervisors of agriculture were employed during the year. Junior Red Cross societies were formed in every one of the 76 municipalities of the island and in practically all of the special and private schools. More than 68,000 members were enrolled and \$21,501 in cash collected.

All of this war work speaks well for the patriotism of teachers and pupils. Although the number of teachers was increased slightly and the total public expenditures for education were augmented by more than \$200,000 as compared with last year, it was not found possible to keep the total enrollment up to the figures reached the year previous. This was due chiefly to reduction in double enrollment, changes of teachers, etc. While the department of education is bravely struggling with its enormous task, nevertheless it becomes increasingly evident as the years go by that the resources of the people of Porto Rico are insufficient to cope with this immense problem of providing educational opportunities for the hundreds of thousands of children that are now in the island. Outside aid from some source will have to be secured before the school work can be organized upon such a scale as will be necessary to overcome within a reasonable period the enormous mass of illiteracy that has accumulated from the long past. The local government is doing its best with its available funds, but the job is too heavy.

The report on general health conditions prepared by the new department of health and published elsewhere, is unusually full and exhaustive, but the importance of the subject justifies the effort to secure and publish all possible information.

Special attention was directed during the year to the matter of the study and control of transmissible diseases which was regarded as of unusually urgent importance because of the approaching encampment of soldiers in the island, and also because of the alarming increase in the death rate which was reported for the previous year. Strong efforts were made during the year to secure more complete reports of all cases of transmissible diseases with encouraging success.

As a matter of course the location of a large encampment of soldiers in the neighborhood of San Juan directed public attention very strongly upon the sanitary conditions actually existing in the city and its environs. Of course many undesirable features were found to exist and some of them deplorable and dangerous, both in the direction of physical and moral safety for the soldiers. Handicapped as it always is by lack of funds, the local government has not as yet been able to remedy in a thoroughgoing way all of the defects in sanitation that exist around Camp Las Casas, but many improvements have been made and more will be carried out in the near future. In the great task of moral sanitation especially a very great improve-

ment has been achieved through the close cooperation of the departments of health, justice, and the police, supported strongly by the public opinion of the island generally. Proper results of a permanent character of this most important and far-reaching movement can not be secured without some financial cooperation on the part of the Federal authorities. This will doubtless be assured because of the vital interest of the soldiers at Camp Las Casas in this difficult matter.

### EXTERNAL COMMERCE.

The value of imports and exports during the fiscal year 1917-18 aggregated \$137,683,304, an increase of \$3,167,163 over the corresponding total of the preceding year. Imports were valued at \$63,389,282, and exports at \$74,294,022, an increase in the former of \$9,844,058 and a decrease of \$6,676,895 in the latter. This decrease was caused by lack of transportation for sugar awaiting shipment.

The following tables indicate the relative values and quantities of imports and exports during the year 1917-18 and previous years:

TABLE 1.—*Merchandise shipped from Porto Rico to the United States and foreign countries.*

Years.	To the United States.	To foreign countries.	Total
1901.....	\$5,581,268	\$3,002,079	\$8,583,367
1902.....	8,378,766	4,055,190	12,433,956
1903.....	11,051,195	4,037,184	15,088,079
1904.....	11,722,826	4,543,077	16,265,903
1905.....	15,633,145	3,076,420	18,709,565
1906.....	19,142,461	4,115,069	23,257,530
1907.....	22,070,133	4,926,167	26,996,300
1908.....	25,891,281	4,753,209	30,644,490
1909.....	26,394,312	3,996,013	30,391,225
1910.....	32,095,645	5,864,374	37,960,219
1911.....	34,765,409	5,152,958	39,918,367
1912.....	42,873,401	6,832,012	49,705,413
1913.....	40,338,023	8,564,942	48,902,965
1914.....	34,423,180	8,679,382	43,102,762
1915.....	42,311,020	7,044,987	49,356,007
1916.....	60,952,768	5,778,905	66,731,573
1917.....	73,115,224	7,855,693	80,970,917
1918.....	65,514,089	8,779,033	74,294,022

TABLE 2.—*Merchandise shipped into Porto Rico from the United States and foreign countries.*

Years.	From the United States.	From foreign countries.	Total.
1901.....	\$6,965,408	\$1,952,728	\$8,918,136
1902.....	10,882,653	2,326,957	13,209,610
1903.....	12,245,845	2,203,441	14,449,286
1904.....	11,210,009	1,958,990	13,169,029
1905.....	13,974,070	2,562,189	16,536,259
1906.....	19,224,881	2,602,734	21,827,665
1907.....	25,686,285	3,580,837	29,267,172
1908.....	22,677,376	3,148,239	25,825,665
1909.....	23,618,545	2,925,731	26,544,326
1910.....	27,097,654	3,537,201	30,634,855
1911.....	34,671,958	4,115,019	38,786,977
1912.....	38,470,963	4,501,928	42,972,891
1913.....	33,155,005	3,745,057	36,900,062
1914.....	32,568,363	3,838,419	36,406,787
1915.....	30,929,831	2,954,485	33,884,316
1916.....	35,892,515	3,068,641	38,961,156
1917.....	49,539,249	4,005,975	53,545,224
1918.....	58,945,758	4,443,534	63,389,282

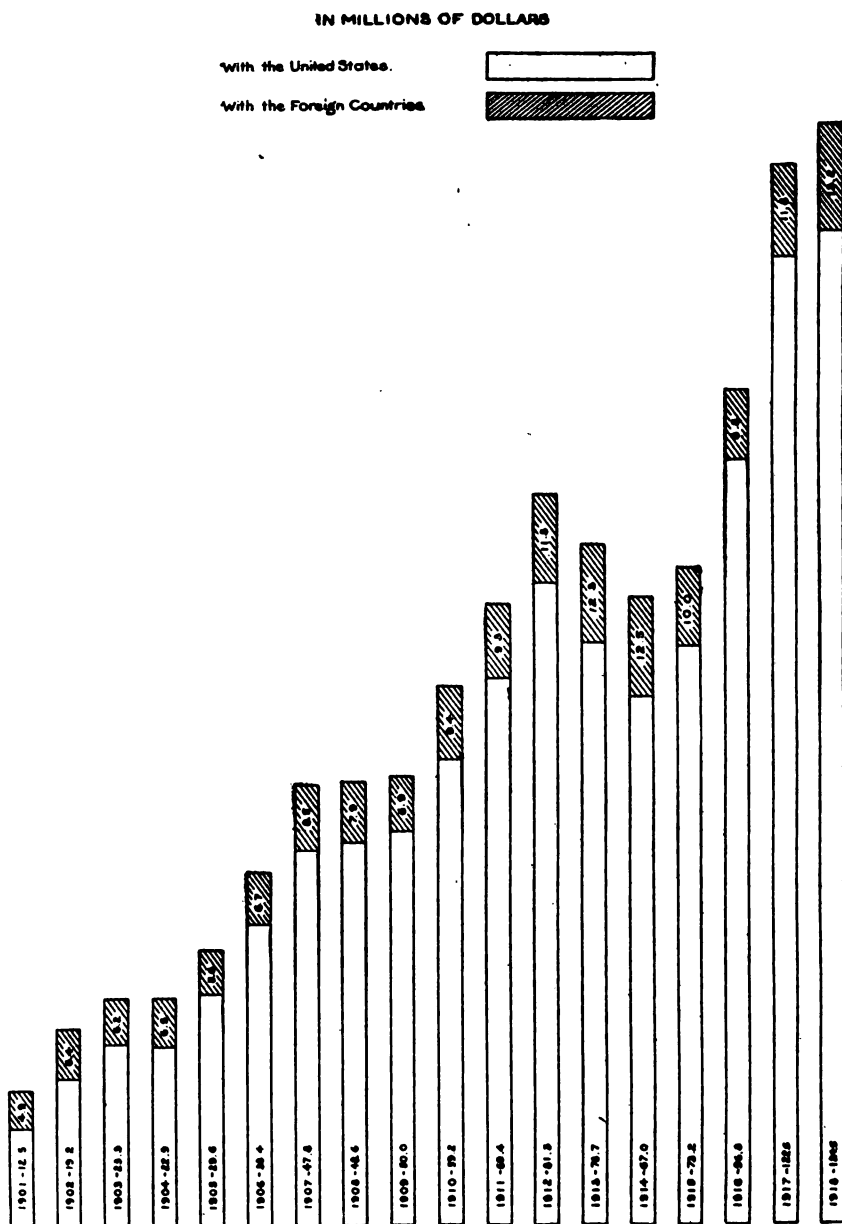


Chart showing comparative total external trade with the United States and foreign countries from 1901-1918.

TABLE 3.—*Merchandise shipped into and from Porto Rico in trade with the United States.*

Years.	Imports.	Exports.	Total trade with United States.
1901	\$6,965,408	\$5,581,288	\$12,546,696
1902	10,882,053	8,378,766	19,261,419
1903	12,245,845	11,051,195	23,297,040
1904	11,210,069	11,722,826	22,932,896
1905	13,974,070	15,633,145	29,607,215
1906	19,224,881	19,142,461	38,367,342
1907	25,686,285	22,070,133	47,756,418
1908	22,677,376	25,891,281	48,568,657
1909	23,618,546	26,394,312	50,012,857
1910	27,097,654	32,095,645	59,193,299
1911	34,671,958	34,765,409	69,437,367
1912	38,470,963	42,873,401	81,344,364
1913	33,155,005	40,538,623	73,693,628
1914	32,568,368	34,423,180	66,991,548
1915	30,929,831	42,311,920	73,241,751
1916	35,892,515	60,952,763	96,845,283
1917	49,539,249	73,115,224	122,654,473
1918	58,945,758	65,514,989	124,460,747

TABLE 4.—*Merchandise shipped into and from Porto Rico in trade with foreign countries.*

Years.	Imports.	Exports.	Total foreign trade.
1901	\$1,952,728	\$3,002,679	\$4,955,407
1902	2,326,967	4,055,190	6,382,147
1903	2,203,441	4,037,884	6,241,325
1904	1,953,960	4,543,077	6,502,037
1905	2,562,189	3,076,420	5,638,609
1906	2,602,784	4,115,069	6,717,853
1907	3,580,887	4,928,167	8,509,054
1908	3,148,289	4,753,209	7,901,498
1909	2,925,781	3,996,913	6,922,694
1910	3,537,201	5,864,574	9,401,775
1911	4,115,039	5,152,958	9,267,997
1912	4,501,928	6,832,012	11,333,940
1913	3,745,057	8,564,942	12,309,999
1914	3,838,419	8,679,582	12,518,001
1915	2,954,465	7,044,987	9,999,452
1916	3,058,641	5,778,805	8,837,446
1917	4,005,975	7,855,693	11,861,668
1918	4,443,524	8,779,033	13,222,557

TABLE 5.—*Statement showing annual trade balance resulting from the commerce between Porto Rico and other ports.*

Fiscal years.	Imports.	Exports.	Balance.	
			In favor of the island.	Against the island.
1901	\$8,918,136	\$8,583,967	.....	\$334,169
1902	13,209,610	12,433,956	.....	775,654
1903	14,449,286	15,089,079	\$639,793	.....
1904	13,169,029	16,265,903	3,096,874	.....
1905	16,536,259	18,709,565	2,173,306	.....
1906	21,827,665	23,287,530	1,459,865	.....
1907	29,267,172	26,966,300	.....	2,270,872
1908	25,825,665	30,644,490	4,818,825	.....
1909	26,544,326	30,391,225	3,846,899	.....
1910	30,634,855	37,960,219	7,325,364	.....
1911	38,786,997	39,918,367	1,131,370	.....
1912	42,972,891	49,705,413	6,732,522	.....
1913	36,900,062	49,103,565	12,203,503	.....
1914	36,406,787	43,102,762	6,695,975	.....
1915	33,884,296	49,356,907	15,472,611	.....
1916	38,951,156	66,731,573	27,780,417	.....
1917	53,545,224	80,970,917	27,425,693	.....
1918	63,389,282	74,294,022	10,904,740	.....

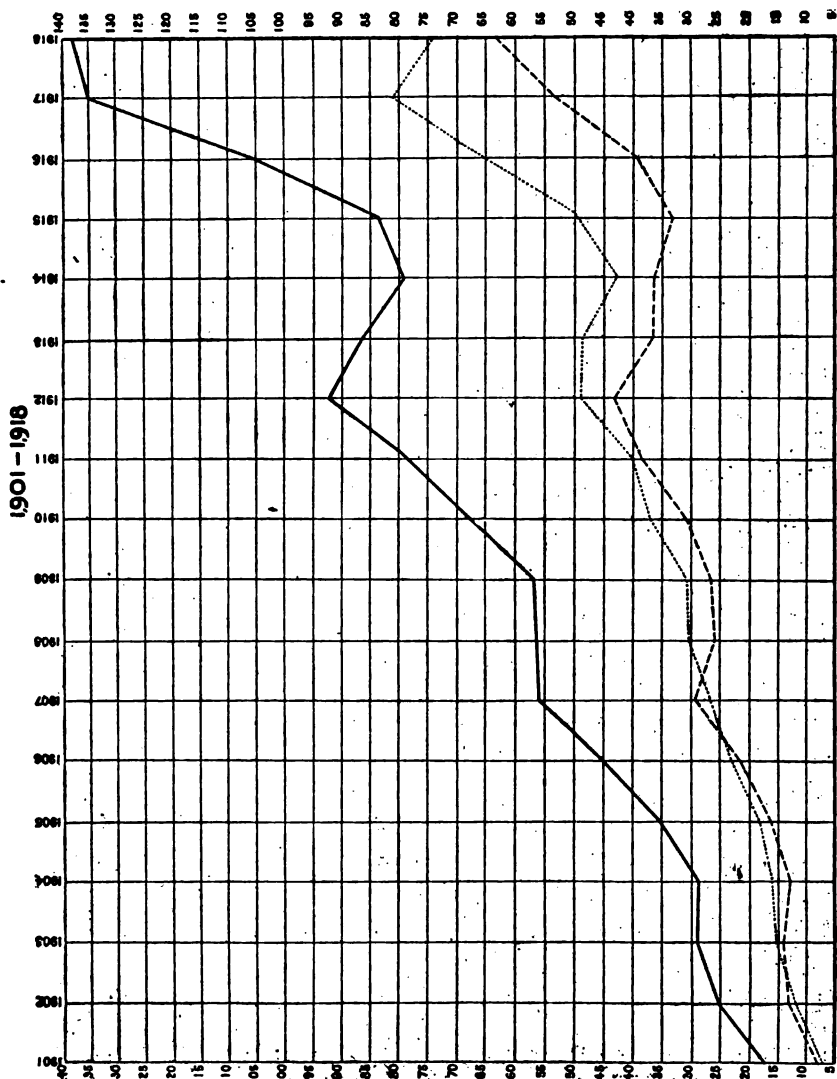


Chart showing general increase of imports and exports and total trade between Porto Rico and the mainland of the United States and other countries from 1901-1918.

TABLE 6.—*Merchandise brought into Porto Rico from the United States and foreign countries during the fiscal year ending June 30, 1918.*

Articles.	Merchandise from United States.		Merchandise imported from foreign countries.	
	Quantity.	Value.	Quantity.	Value.
Agricultural implements.....		\$162, 194		\$51, 246
Animals.....		5, 706		17, 780
Breadstuffs:				
Bread and biscuits.....pounds	3, 255, 108	400, 323		3, 416
Corn meal.....barrels	23, 555	219, 870		
Oats.....bushels	131, 929	114, 850		
Wheat flour.....barrels	295, 796	3, 290, 960		
Rice.....pounds	125, 131, 532	9, 144, 940	2, 617, 456	94, 511
All other.....		294, 077		2, 603
Canneries.....pounds	937, 946	145, 064		
Cars, carriages, and parts of.....		1, 562, 807		
Cement.....barrels	248, 407	559, 692		
Chemicals, drugs, dyes, and medicines.....		925, 163		297, 379
Coal.....tons	104, 908	537, 453		3, 398
Cocoa and chocolate, prepared.....		68, 495		1, 944
Cotton, manufactures of:				
Cloths.....yards	44, 922, 200	4, 734, 248	75, 233	19, 012
All other manufactures of.....		3, 676, 765		128, 578
Earthen, stone, and china ware.....		284, 127		355
Explosives.....		52, 978		
Fertilizers.....tons	40, 289	2, 927, 249	522	2, 477
Fibers, vegetable and textile grasses:				
Cordage.....pounds	856, 012	177, 706	176	94
Jute bags.....do		1, 065, 958		540, 342
All other.....		275, 829		53, 234
Fish:				
Dried, smoked, or cured.....pounds	10, 860, 900	1, 111, 368	6, 284, 174	880, 040
All other.....		267, 433		8, 302
Fruits and nuts.....		220, 343		46, 264
Glass and glassware.....		166, 793		4, 217
India rubber, manufactures of.....		954, 415		337
Instruments and apparatus, scientific.....		32, 380		
Iron and steel, manufactures of.....		5, 012, 359		5, 982
Leather and manufactures of.....		2, 325, 309		34, 782
Meat and dairy products:				
Meat products—				
Bacon.....pounds	110, 959	29, 667		
Hams and shoulders, cured.....do	2, 770, 625	674, 623		
Pork, pickled.....do	7, 183, 263	1, 677, 892		
Lard.....do	2, 699, 956	734, 878		
Lard compounds.....do	6, 164, 577	1, 316, 446		
All other meat products.....		578, 460		85, 915
Dairy products—				
Butter.....pounds	861, 999	182, 827	86, 280	53, 667
Cheese.....do	1, 163, 022	328, 714	8, 436	1, 939
Milk, condensed.....do	3, 667, 069	551, 105		226
Musical instruments, and parts of.....		58, 116		1, 723
Oils:				
Mineral.....gallons	5, 916, 744	1, 416, 416	13, 524, 000	257, 236
Vegetable.....		162, 482		78, 918
Paints, pigments, and varnishes.....		336, 681		2, 011
Paper, manufactures of.....		1, 190, 754		95, 482
Perfumeries, cosmetics, and toilet preparations.....		134, 837		32, 318
Seeds.....				25, 329
Silks, manufactures of.....		426, 575		352
Soap:				
Toilet or fancy.....		75, 825		7, 837
All other.....pounds		746, 524		
Spirits, wines, and malt liquors:				
Malt liquors.....gallons	86, 548	44, 134	2, 409	1, 923
Spirits, distilled.....proof gallons	9, 848	57, 256	1, 765	8, 431
Wines.....gallons	20, 375	17, 032	26, 227	37, 707
Champagne.....dozen quarts			607	9, 092
Sugar, refined.....pounds	3, 017, 215	245, 074		
Straw and palm leaf, manufactures of.....		91, 727		5, 749
Tobacco and manufactures of:				
Unmanufactured.....pounds	2, 003, 224	637, 872		19, 681
Manufactures of.....		120, 103		5
Toys.....		69, 130		1, 469
Vegetables:				
Beans and dried peas.....bushels	218, 608	1, 259, 334	18, 583	72, 467
Onions.....do	46, 928	86, 263	3, 572	3, 763
Potatoes.....do	261, 911	310, 949	6, 991	10, 766
All other canned.....		54, 431		3, 697
All other, including pickles and sauces.....		9, 869		99, 284



TABLE 6.—*Merchandise brought into Porto Rico from the United States and foreign countries during the fiscal year ending June 30, 1918—Continued.*

Articles.	Merchandise from United States.		Merchandise imported from foreign countries.	
	Quantity.	Value.	Quantity.	Value.
Wood and manufactures of:				
Boards, deals, planks, and scantlings.....M feet..	14, 645	\$512, 232	1, 639	\$46, 129
Furniture.....		335, 784		4, 908
All other.....		\$75, 551		12, 700
Wool, manufactures of.....		271, 644		635
All other articles.....		2, 604, 557		1, 265, 982
Total value.....		58, 945, 758		4, 443, 524
Total value of domestic merchandise from United States to Porto Rico.....				
Total value of foreign merchandise from United States to Porto Rico.....				

<sup>1</sup> These figures include chiefly \$338,425 worth of sugar cane imported from the Dominican Republic and also great amounts of crude cocoa, tobacco, hides, beeswax, etc., imported from the same country in transit to the United States

TABLE 7.—*Domestic and foreign merchandise shipped from Porto Rico to the United States and foreign countries during the fiscal year ending June 30, 1918.*

Articles.	Domestic merchandise shipped to the United States.		Domestic merchandise exported to foreign countries.	
	Quantity.	Value.	Quantity.	Value.
Beeswax.....pounds..	55, 296	\$17, 243	567	\$171
Cocoa.....do.....	79, 398	8, 320		
Coffee.....do.....	256, 697	36, 064	37, 361, 916	5, 466, 262
Cotton, Sea Island.....do.....	128, 071	48, 345		
Fruits and nuts:				
Fruits—				
Green, ripe, or dried—				
Grapefruit.....boxes..	549, 125	1, 120, 330		
Oranges.....do.....	602, 987	1, 230, 984	239	567
Pineapples.....		617, 496		
All other.....		4, 461		3, 917
Canned pineapples.....		75, 216		
All other.....		30		
Prepared or preserved pineapples.....		2, 010		603
Nuts: Coconuts.....		561, 062		11, 538
Hides and skins, other than fur skins.....pounds..	981, 827	283, 143	5, 459	3, 767
Honey.....do.....	3, 137, 942	398, 653	672, 471	71, 737
Leather, sole.....do.....		450	33, 903	16, 250
Meat products: Tallow.....do.....	38, 814	6, 106	134, 954	21, 993
Perfumeries, cosmetics, etc., bay rum		31, 183		
Seeds:				
Annatto.....pounds..			701, 049	15, 300
Cotton.....do.....	766, 094	78, 357		
Spirits, distilled: Alcohol.....proof galls..	133, 799	156, 736	81, 938	84, 869
Straw hats.....		160, 187		18, 678
Sugar and molasses:				
Sugar.....short tons..	336, 469	41, 310, 845	319	51, 384
Molasses.....pounds..	14, 495, 762	1, 213, 382	1, 068, 292	108, 167
Tobacco, and manufactures of:				
Manufactures of—				
Cigarettes.....M.....	4, 255	16, 656	2, 030	9, 076
Cigars.....M.....	179, 038	7, 131, 535	150	3, 168
Unmanufactured:				
Leaf.....pounds..	13, 124, 315	7, 913, 675	82, 177	14, 085
Scrap.....do.....	3, 989, 831	1, 054, 370		
All other domestic articles.....		1, 584, 023		1, 2, 815, 332
Total exports of domestic merchandise.....		65, 053, 842		8, 716, 844
Total exports of foreign merchandise.....		461, 147		62, 189
Total exports of domestic and foreign merchandise.....		65, 514, 989		8, 779, 033

<sup>1</sup> These figures include all United States goods exported from Porto Rico and also those exported from the United States via Porto Rico.

The chief products included in these figures are: Guano (fertilizer), 3,260 tons, \$72,662; coconut fiber, 422,784 pounds, \$16,841; manganese ore, 4,167,567 pounds, \$132,958; and copra, 130,311 pounds, \$9,226.

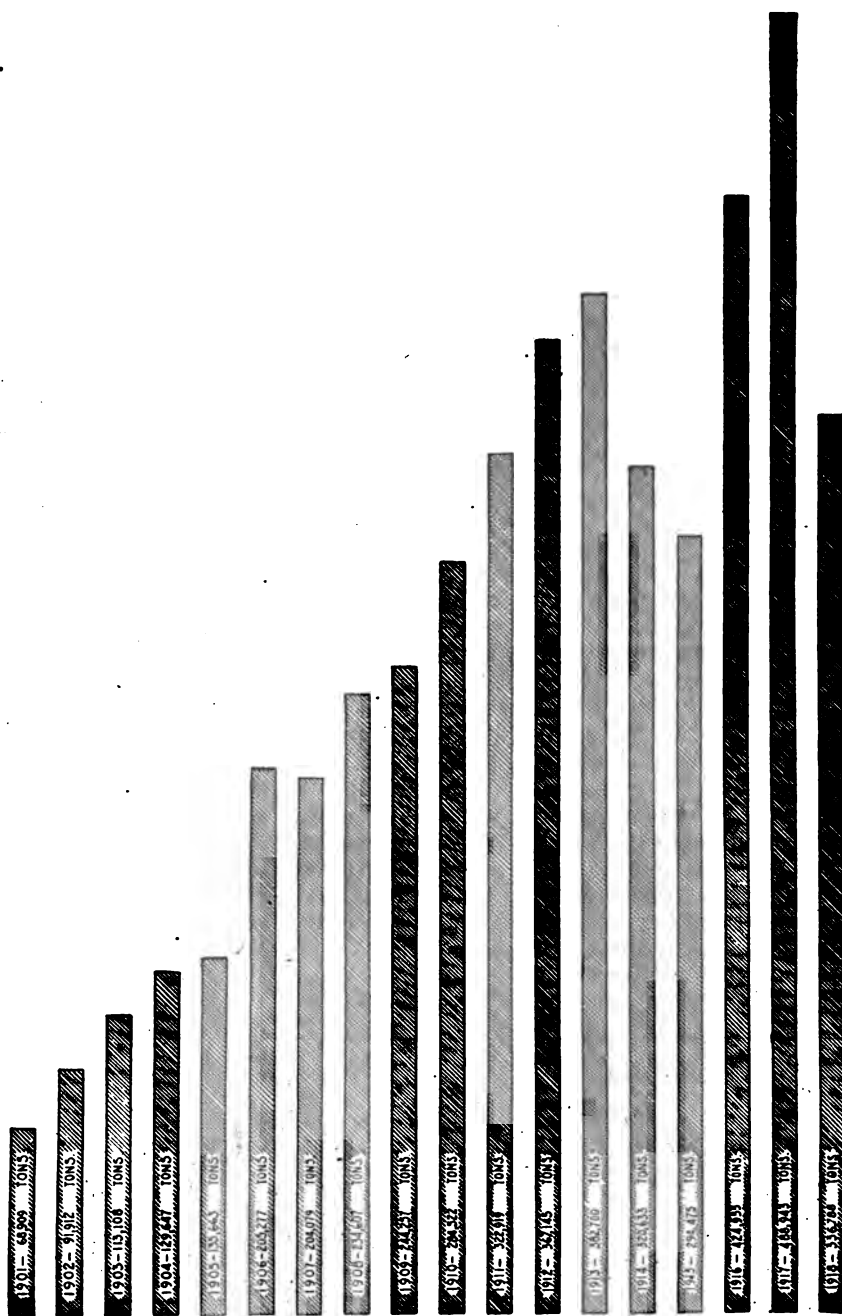
Breadstuffs amounting to \$13,455,020 were imported during the year, of which \$13,354,490 came from the United States and \$100,530 from foreign countries. The chief items were, as usual, rice, valued at \$9,239,451, and wheat flour, \$3,280,960. Importations of cotton goods aggregated \$8,558,603, an increase of \$2,462,697; meat and meat products, \$5,097,881, showing an increase of \$762,850; fertilizer, \$2,929,726, an increase of \$746,747 over the preceding year manufactures of iron and steel, \$5,018,341, an increase of \$201,825; leather goods, \$2,360,091, showing an increase of \$383,948. The importations of dairy products, from the United States show an increase of \$409,758 over last year, being valued at \$1,062,646, while the imports of this commodity from foreign countries, valued at \$55,832, show a falling off of \$78,409. The value of jute bags imported from the United States shows an increase of \$900,367 as compared with the year 1916-17. Importation of fish and fish products from the United States increased by \$575,165 and from foreign countries by \$34,323 over last year's figures. The value of carriages, cars, and parts imported from the United States was \$1,562,807, all from the United States, as against \$1,797,922 from the United States and \$1,900 from foreign countries in 1916-17, showing a falling off of \$237,015. The importations of beans and dried peas from the United States were valued at \$1,259,334 and from foreign countries \$72,467, aggregating \$1,331,801, an increase of \$225,830 in the total for last year.

As will be seen by reference to the tables these increases are chiefly a matter of higher prices rather than increases in quantities.

Sugar exports to the United States amounted to 336,469 short tons, valued at \$41,310,845. In addition, 319 tons were shipped to foreign countries, valued at \$51,384. These figures represent at first glance a tremendous reduction in the total output of sugar as compared with last year's figures, 488,943 tons. This difference is due chiefly to lack of shipping facilities. On the 1st of July we had on the island 793,000 sacks of sugar, making a total of 123,708 tons awaiting shipment. If this amount were added to the figures given in the table we would have a total sugar production for the year 1917-18 of 460,496 tons, representing a reduction of only 28,447 tons as compared with the previous year's figures.

TABLE 8.—*Sugar exports.*

Fiscal year.	Short tons.	Value	Average price per ton.
1901.....	68,909	\$4,715,611	\$68.43
1902.....	91,912	5,890,302	64.06
1903.....	113,108	7,470,122	66.04
1904.....	129,647	8,690,814	67.03
1905.....	135,663	11,925,904	87.90
1906.....	205,277	14,184,667	69.10
1907.....	204,079	14,770,683	72.37
1908.....	234,607	18,690,904	76.52
1909.....	244,267	18,432,446	75.46
1910.....	284,522	23,545,922	82.76
1911.....	322,919	24,479,346	75.81
1912.....	367,145	31,544,063	85.92
1913.....	382,700	26,619,158	69.55
1914.....	320,633	20,240,335	63.12
1915.....	294,475	27,278,754	92.64
1916.....	424,955	45,809,445	107.79
1917.....	488,943	54,015,908	110.47
1918.....	336,788	41,862,229	122.81



(Amounts in short tons.)

Chart showing increase in quantity of sugar exported from Porto Rico, 1901-1918.

1901-1918

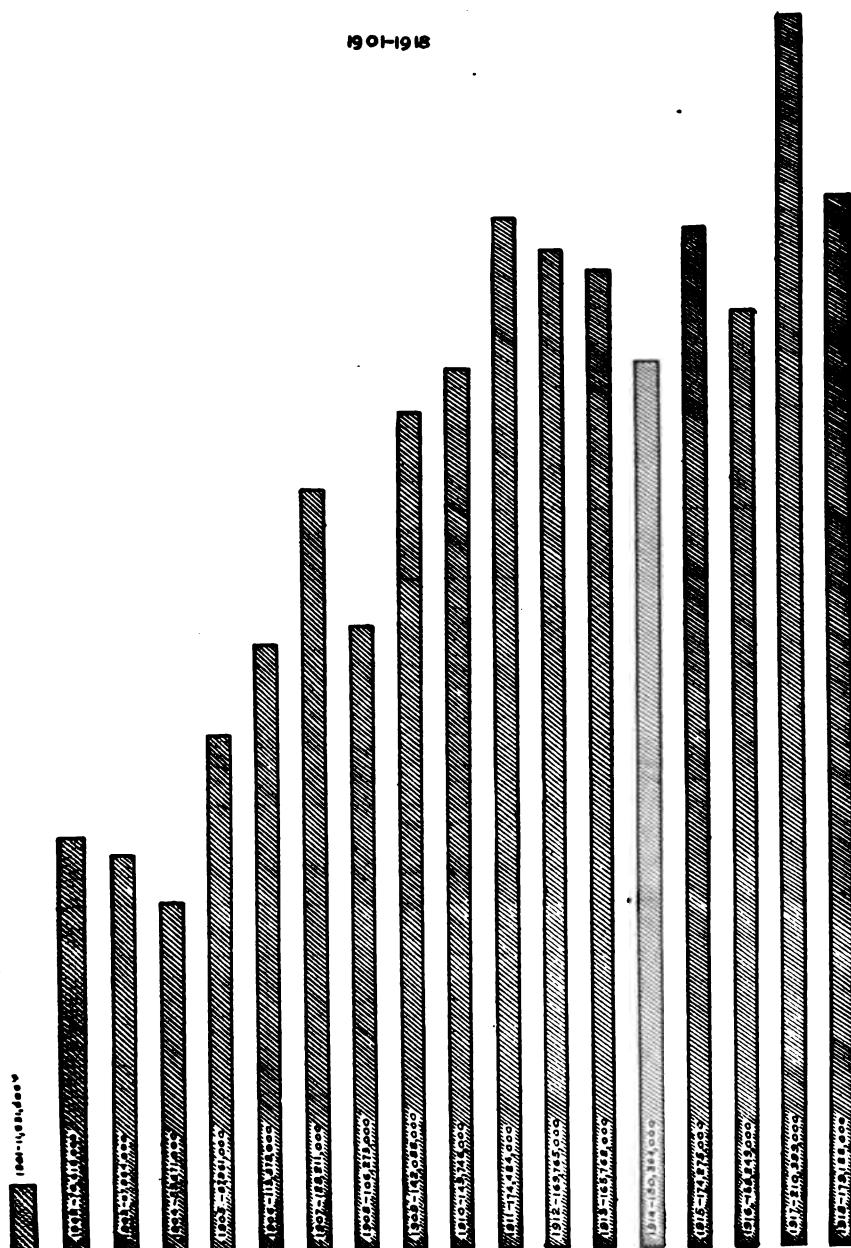


Chart showing increase in number of cigars exported from Porto Rico, 1901-1918.

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The exportations of unmanufactured tobacco amounted to 17,196,323 pounds, valued at \$8,982,130, representing an increase of 7,787,600 pounds in quantity and \$5,131,460 in value over the previous year.

TABLE 9.—*Cigars.*

Fiscal year.	Withdrawn for consumption.	Withdrawn for export.	Total output.
1907.....	74,698,430	132,669,823	207,368,253
1908.....	76,983,130	103,781,719	180,765,549
1909.....	84,933,360	140,302,271	225,235,631
1910.....	92,700,180	151,724,438	244,424,598
1911.....	101,064,495	174,743,098	275,807,593
1912.....	111,682,615	169,763,656	281,448,271
1913.....	119,638,300	165,768,512	284,806,812
1914.....	122,711,543	159,363,991	283,075,534
1915.....	101,423,683	174,275,407	275,698,490
1916.....	<sup>1</sup> 109,130,396	<sup>1</sup> 159,248,855	268,379,151
1917.....		219,399,365	
1918.....	<sup>1</sup> 106,646,685	181,779,519	288,426,204

<sup>1</sup> Treasury figures.

TABLE 10.—*Cigarettes.*

Fiscal year.	Withdrawn for consumption.	Withdrawn for export.	Total output.
1907.....	347,722,000	10,460,000	358,182,000
1908.....	354,407,900	11,232,424	365,640,324
1909.....	365,625,500	11,244,500	376,770,000
1910.....	393,844,300	<sup>1</sup> 13,142,000	406,986,300
1911.....	459,710,045	11,760,000	471,470,045
1912.....	532,431,000	<sup>1</sup> 11,293,350	<sup>1</sup> 543,724,350
1913.....	404,861,210	<sup>1</sup> 8,907,600	<sup>1</sup> 473,768,810
1914.....	376,695,120	<sup>1</sup> 6,195,000	<sup>1</sup> 382,890,120
1915.....	339,080,165	<sup>1</sup> 12,020,750	<sup>1</sup> 351,100,915
1916.....	<sup>1</sup> 308,025,865	<sup>1</sup> 11,785,430	<sup>1</sup> 319,811,295
1917.....		9,571,250	
1918.....	<sup>1</sup> 340,077,040	6,439,600	346,516,640

<sup>1</sup> Treasury figures.

TABLE 11.—*Tobacco leaf and scrap exported.*

Fiscal year.	Pounds.	Value.
1907.....	4,344,059	\$1,232,058
1908.....	8,402,298	1,996,055
1909.....	4,539,320	1,250,237
1910.....	4,176,172	1,258,317
1911.....	4,450,012	1,554,783
1912.....	5,456,751	2,320,130
1913.....	8,536,776	3,188,227
1914.....	9,244,490	3,206,610
1915.....	9,285,333	3,204,423
1916.....	8,084,914	3,033,149
1917.....	9,408,723	3,850,670
1918.....	17,196,323	8,982,130

The exportations of coffee to the United States amounted to 256,697 pounds, valued at \$39,064; and to foreign countries, 37,361,916 pounds, valued at \$5,466,252. These figures represent an increase of 44,673 pounds, with a value of \$6,608 over the preceding year with the United States. On the contrary, shipments to foreign countries decreased 2,041,206 pounds in quantity and \$393,373 in value. This decline is also partly due to difficulties in transportation.

TABLE 12.—*Coffee exports.*

Fiscal year.	Pounds.	Value.	Average price.
1901.....	12,157,340	\$1,678,765	\$0.137
1902.....	26,906,390	3,195,062	.118
1903.....	35,207,139	3,970,374	.112
1904.....	34,329,972	3,903,357	.113
1905.....	16,849,739	2,141,000	.127
1906.....	28,290,322	3,481,102	.123
1907.....	38,756,750	4,693,004	.121
1908.....	35,256,489	4,304,009	.122
1909.....	28,489,236	3,715,744	.130
1910.....	45,209,792	5,669,602	.125
1911.....	33,937,021	4,992,779	.147
1912.....	40,146,365	6,754,913	.168
1913.....	49,774,197	8,511,316	.171
1914.....	50,211,947	8,193,544	.163
1915.....	51,125,620	7,032,791	.138
1916.....	32,144,283	5,049,283	.157
1917.....	39,615,146	5,892,031	.149
1918.....	37,618,613	5,505,316	.146

TABLE 12a.—*Coffee exported from Porto Rico during the fiscal year ended June 30, 1918.*

Countries.	Pounds.	Value.
Austria-Hungary.....		
Denmark.....		
France.....	1,227,819	\$210,505
Gibraltar.....		
Italy.....		
Netherlands.....		
Norway.....		
Spain.....	9,598,203	1,557,710
Sweden.....		
Canada.....		
Cuba.....	26,460,877	3,686,569
Virgin Islands.....	22,335	3,255
Dutch Islands.....		
French Islands.....	100	16
British Islands.....	1,000	165
Argentina.....		
Uruguay.....		
Canary Islands.....	26,137	3,401
Philippine Islands.....		
Spanish Africa.....		
Dominican Republic.....	26,445	4,631
Total exported to foreign countries.....	37,361,916	5,466,252
Total shipped to United States.....	256,697	39,064
Total.....	37,618,613	5,505,316

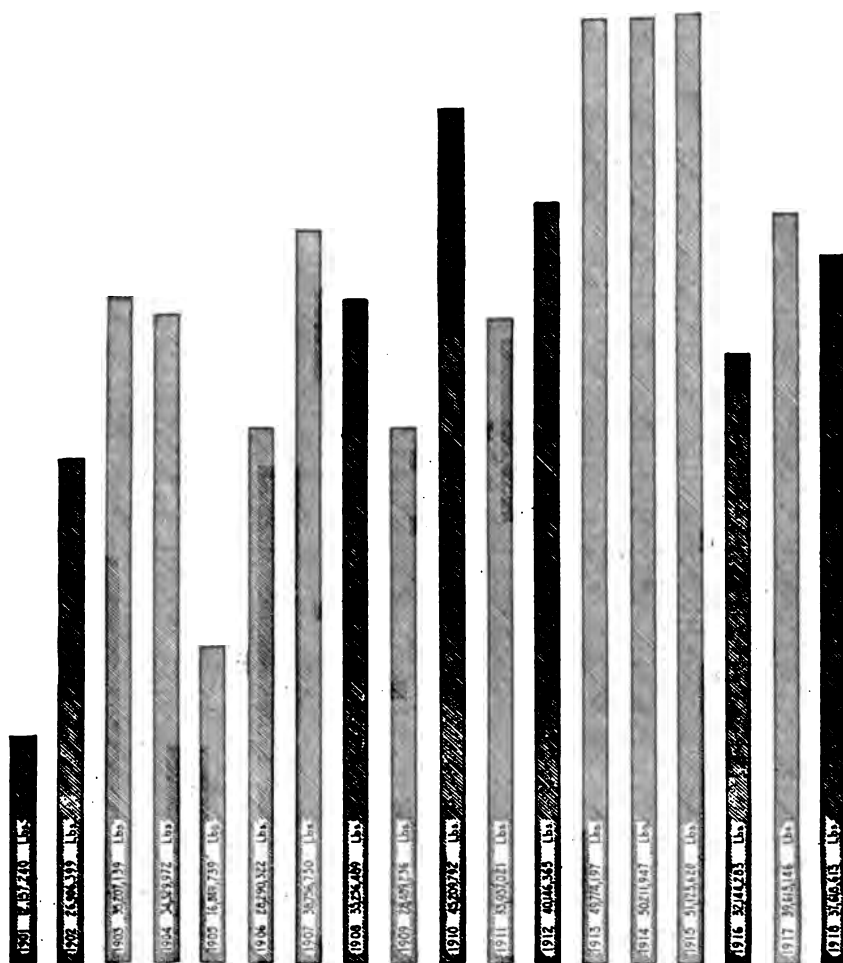
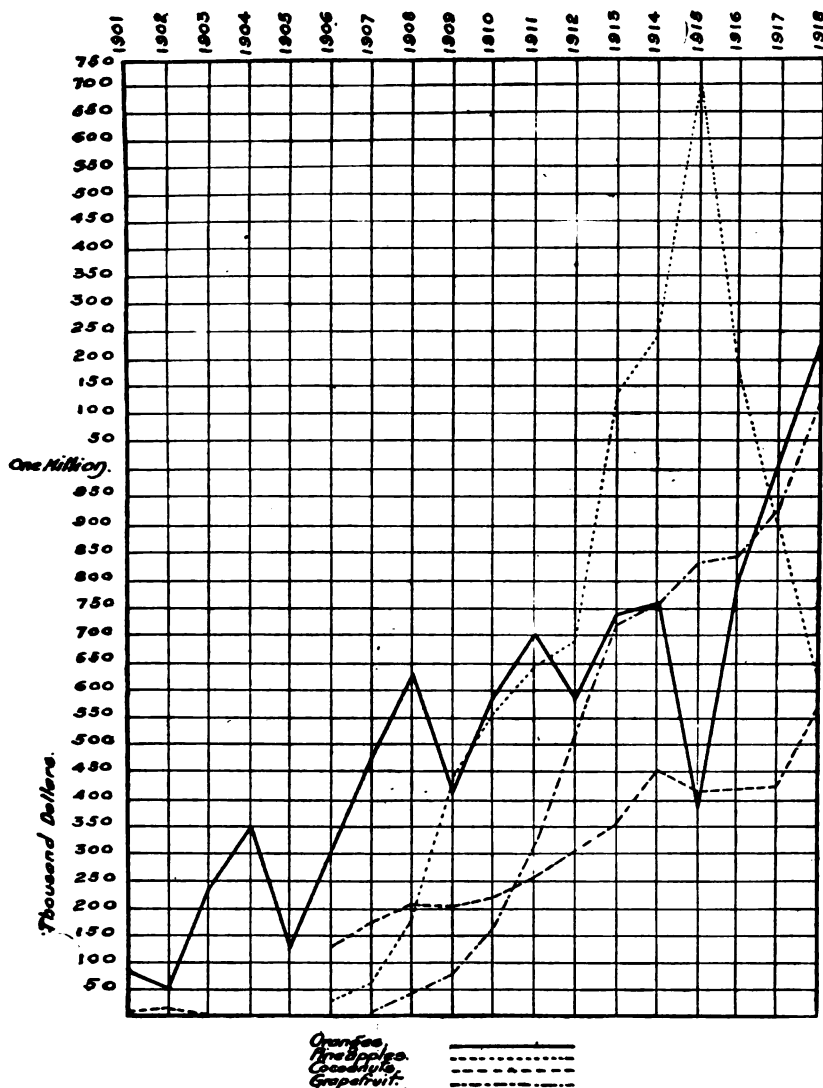


Chart showing the quantity of coffee exported from Porto Rico during the years 1901-1918.



<u>Fiscal Year.</u>	<u>Oranges.</u>	<u>Pineapples.</u>	<u>Coconuts.</u>	<u>Grapefruit.</u>
1901	\$ 24,475	(1)	\$ 2,334	(1)
1902	51,364	(1)	12,720	(1)
1903	250,821	(1)	326	(1)
1904	352,646	(1)	(1)	(1)
1905	125,422	(1)	(1)	(1)
1906	295,635	27,226	125,793	(1)
1907	466,312	54,231	174,937	\$ 7,586
1908	650,720	172,773	206,704	44,633
1909	401,912	442,780	204,498	76,310
1910	582,716	555,044	218,870	162,743
1911	703,969	641,291	258,168	302,638
1912	584,414	684,774	309,863	325,048
1913	740,091	1,142,348	353,690	726,611
1914	752,180	1,246,001	451,882	751,769
1915	576,181	1,720,863	410,378	254,440
1916	790,797	1,176,406	413,373	237,014
1917	1,009,737	916,415	459,564	635,477
1918	1,231,551	617,496	575,600	1,120,330

Chart showing increase in the value of oranges, pineapples, coconuts, and grapefruit exported from Porto Rico



During the fiscal year 1917-18 there was another increase in the exportations of oranges of \$221,814, in coconuts of \$134,036, and in grapefruit of \$180,653. Pineapples continued to decline, the total exports having been \$298,919 less than in the previous fiscal year.

TABLE 13.—Value of fruit exports.

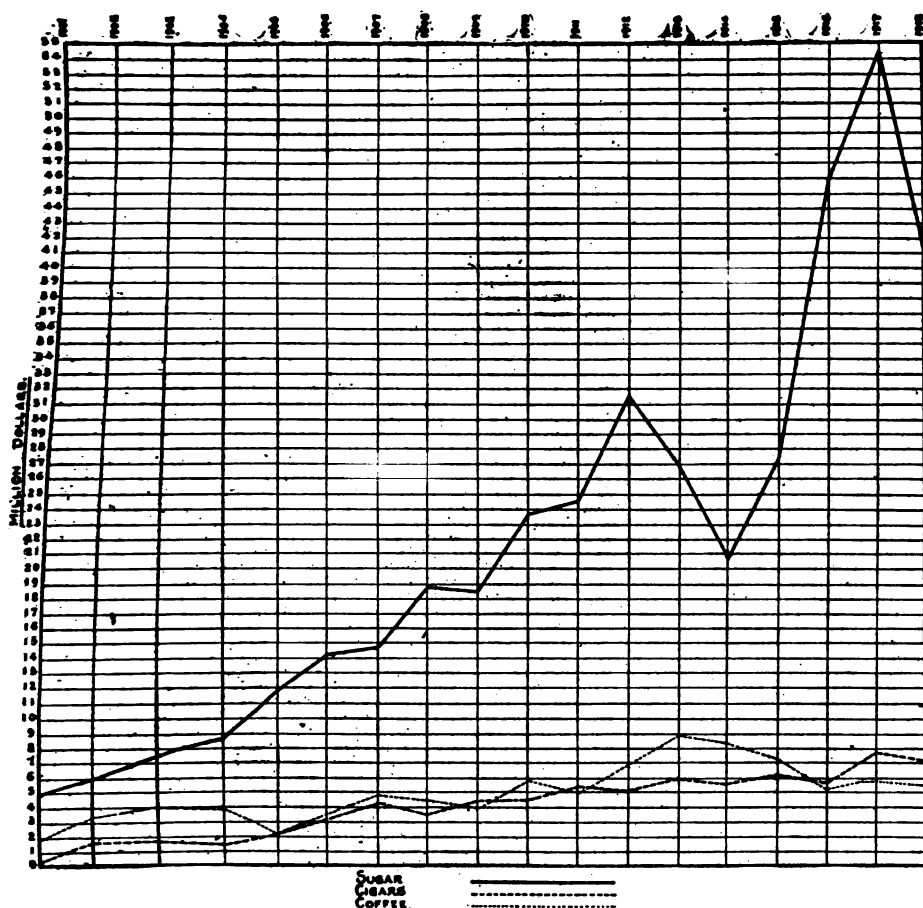
Fiscal year.	Oranges.	Pineapples.	Canned pine-apples.	Coco-nuts.	Grape-fruits.	Other fruits.	Total.
1901.....	\$84,475	(1)	(1)	\$8,324	(1)	\$16,992	\$109,801
1902.....	51,344	(1)	(1)	12,720	(1)	9,898	73,982
1903.....	230,821	(1)	(1)	326	(1)	61,956	293,103
1904.....	352,646	(1)	(1)	(1)	(1)	81,214	433,860
1905.....	125,422	(1)	(1)	(1)	(1)	130,478	255,900
1906.....	295,633	\$27,826	\$42,186	129,793	(1)	7,420	502,858
1907.....	469,312	64,831	63,519	174,957	\$7,596	3,737	783,942
1908.....	630,720	172,779	98,203	203,704	44,535	11,320	1,164,261
1909.....	401,912	442,780	117,830	201,498	76,310	18,154	1,261,484
1910.....	582,718	555,044	106,587	218,870	162,749	9,851	1,635,817
1911.....	703,969	641,291	149,744	253,163	309,693	11,123	2,073,993
1912.....	584,414	684,774	258,671	303,833	525,048	15,972	2,377,762
1913.....	740,991	1,142,348	147,564	353,690	726,811	10,415	3,120,919
1914.....	752,180	1,246,001	175,534	451,882	751,769	23,537	3,400,903
1915.....	378,181	1,723,863	84,735	410,378	834,440	9,560	3,441,157
1916.....	790,797	1,176,406	122,676	413,573	837,014	14,619	3,355,285
1917.....	1,009,737	916,415	139,765	433,564	939,677	18,411	3,459,569
1918.....	1,231,451	617,496	75,216	572,600	1,120,330	11,021	3,623,214

<sup>1</sup> Shipments included under "Other fruits."

TABLE 14.—Statement, by countries, of value of merchandise brought into Porto Rico from the United States and foreign countries for the 5 years ending June 30, 1918.

Countries.	Shipped into Porto Rico.				
	1914	1915	1916	1917	1918
United States.....	\$32,568,368	\$30,929,831	\$35,892,515	\$49,539,249	\$53,945,753
Austria-Hungary.....	4,964	5,043			
Belgium.....	53,563	16,033	370		
Denmark.....	121,956	90,026	80,979	85,252	54,231
France.....	309,376	149,059	144,209	157,101	147,211
Germany.....	336,109	139,373	1,011		
Italy.....	74,205	76,033	61,551	66,734	51,720
Netherlands.....	234,084	159,078	23,805	3,927	1,631
Norway.....		4,446	15,746	9,705	
Spain.....	772,200	679,415	650,317	985,370	523,041
Sweden.....	5,659	1,296	23,146	32,141	23,767
Switzerland.....	543	2,911	295		4,002
United Kingdom.....	475,639	339,681	351,011	191,122	253,732
Canada.....	564,344	506,328	651,183	776,482	863,550
Newfoundland.....	60,872	8,272	12,142	93,058	38,021
Panama.....		13			
Mexico.....	20,966	87,986	212,520	251,269	257,236
West Indies:					
British.....	70,553	735		10	430
Cuba.....	52,006	68,871	68,574	73,966	85,634
Virgin Islands.....	4,877	4,868	29,060	20,010	29,345
Dutch.....	13,165	7,224	6,309	35,235	43,546
French.....		1,350	14,419	4,635	1,652
Haiti.....	2,610		16	1,866	1,652
Dominican Republic.....	92,605	234,356	382,441	595,450	1,166,559
Argentina.....	81,800	69,550	36,336	14,968	
Colombia.....	3,079	5,295	7,340	433	867
Ecuador.....		184		30	
Peru.....			14	19,955	
Uruguay.....		111	1,244	1,928	3,678
Venezuela.....	4,330	28,113	4,457	31,831	81,196
East Indies—British India.....	3,790	16,232	11,588	17,650	54,823
Japan.....	394,499	205,928	196,917	446,727	471,182
Canary Islands.....		291	1,316	7,371	97,467
Nicaragua.....	50,473	50,241	54,461	54,199	24,918
Tripoli.....	90				
Hongkong.....	21	5			
Costa Rica.....		118			
British East Africa.....			18,823		
Chile.....				27,251	162,313
British Guiana.....				453	
Total.....	36,406,787	33,884,296	38,951,156	53,545,224	63,389,282

<sup>1</sup> This value includes great amounts of merchandise imported into Porto Rico in transit to the United States.



Fiscal Year	Sugar	Cigars	Coffee
1901	4,713,611	306,115	1,478,763
1902	5,850,302	1,849,235	3,193,662
1903	7,470,122	1,733,795	3,970,374
1904	8,690,814	1,460,496	3,903,237
1905	11,923,804	2,132,051	2,141,009
1906	14,184,667	3,074,226	3,481,192
1907	14,770,682	4,241,410	4,695,004
1908	18,690,504	3,414,140	4,304,609
1909	18,432,446	4,388,895	3,713,744
1910	23,548,322	4,480,030	3,669,602
1911	24,479,346	5,355,223	4,992,779
1912	31,344,063	5,086,711	6,754,913
1913	26,619,158	5,006,886	8,511,316
1914	20,240,353	5,597,276	8,193,344
1915	27,278,754	6,016,122	7,082,791
1916	45,809,445	5,531,533	5,049,283
1917	84,015,905	7,843,010	5,692,081
1918	41,382,229	7,124,693	5,303,316

Chart showing increase in the value of three principal products exported from Porto Rico, namely, sugar, cigars, and coffee, from 1901-1918.

TABLE 15.—*Statement, by countries, of value of merchandise shipped from Porto Rico to the United States and foreign countries for the past 5 years ending June 30, 1918.*

Countries	Shipped from Porto Rico.				
	1914	1915	1916	1917	1918
United States.....	\$34,423,180	\$42,311,920	\$60,962,768	\$73,115,224	\$65,514,969
Austria-Hungary.....	1,601,958	1,630			
Belgium.....	18,818				
Denmark.....	3,216	28,557			
France.....	843,264	815,527	276,091	567,046	229,724
Germany.....	496,100	21,369			
Gibraltar.....	24,451	7,143			
Italy.....	602,383	783,354	401,551	39,292	250
Netherlands.....	105,659	146,065	86,456	174	
Norway.....	15,796	13,464	9,830		
Russia.....	19,064				
Roumania.....	24,575				
Spain.....	1,368,491	1,876,106	1,292,378	1,837,874	1,651,161
Sweden.....	96,215	140,910	253,696		
Switzerland.....	4,225				
United Kingdom.....	79,748	6,300	33,507	53,880	155,684
Canada.....	10,072	22	85		
West Indies:					
British.....	2,920	2,593	18,589	4,745	15,465
Cuba.....	3,089,075	2,790,771	2,781,292	3,561,478	3,809,504
Virgin Islands.....	29,932	23,780	39,515	299,653	312,226
Dutch.....	32,561	34,436	71,322	106,190	67,623
French.....	2,116	13,673	62,267	54,537	113,475
Haiti.....				1,376	11,293
Dominican Republic.....	51,088	223,645	276,892	1,257,093	1,236,170
Argentina.....	16,467	31,958	13,571		
Colombia.....	10,227	21,799	50,050		
Uruguay.....	745	777	150		
Venezuela.....	4,910	89,792	30,425	16,893	31,459
Philippine Islands.....	13,568	7,942			
Canary Islands.....	8,814	11,624	75,834	49,891	19,090
Spanish Africa.....	1,915	1,750	1,690	1,623	
Finland.....	11,170				
Mexico.....			2,058		
Brazil.....				2,200	
Dutch East Indies.....				2,841	
Chile.....					291
Total.....	43,102,762	49,356,907	66,731,573	80,970,917	74,294,022

<sup>1</sup> These figures include all articles exported from United States to the Dominican Republic via Porto Rico.

TABLE 16.

Fiscal year.	Sugar.	Cigars.	Coffee.
1901.....	\$4,715,611	\$306,115	\$1,078,765
1902.....	5,890,302	1,549,235	3,196,662
1903.....	7,470,122	1,753,795	3,970,574
1904.....	8,660,814	1,460,496	3,903,257
1905.....	11,925,804	2,152,051	2,141,000
1906.....	14,184,667	3,074,226	3,481,102
1907.....	14,770,632	4,241,410	4,693,004
1908.....	18,690,504	3,414,140	4,304,600
1909.....	18,432,446	4,383,893	3,715,744
1910.....	23,545,922	4,480,030	5,660,602
1911.....	24,479,346	5,355,223	4,992,779
1912.....	31,544,083	5,086,711	6,754,913
1913.....	26,619,158	5,890,688	8,511,316
1914.....	20,240,335	5,597,276	8,193,544
1915.....	27,278,754	6,016,122	7,082,791
1916.....	45,809,445	5,531,335	5,040,283
1917.....	54,015,903	7,843,010	5,892,081
1918.....	41,362,229	7,134,693	5,606,316

TABLE 17.

Fiscal year.	Imports.	Exports	Total
1901.....	\$8,918,136	\$8,583,667	\$17,502,103
1902.....	13,209,610	12,433,956	25,643,566
1903.....	14,449,286	15,089,079	29,538,365
1904.....	13,169,029	16,265,003	29,434,932
1905.....	16,536,250	18,709,765	35,245,924
1906.....	21,827,665	23,257,330	45,085,195
1907.....	29,287,172	26,996,300	56,283,472
1908.....	25,825,665	30,644,490	56,470,155
1909.....	26,544,326	30,391,225	56,935,551
1910.....	30,634,855	37,960,219	68,595,074
1911.....	38,786,997	39,918,467	78,705,364
1912.....	42,972,891	49,705,413	92,678,304
1913.....	36,900,062	49,103,565	86,003,627
1914.....	36,406,787	43,102,762	79,509,549
1915.....	33,884,296	49,356,677	83,241,203
1916.....	38,951,156	66,731,473	105,682,729
1917.....	53,545,224	80,970,917	134,516,141
1918.....	63,389,292	74,294,122	137,683,304

## LEGISLATION.

The first regular session of the Ninth Legislature of Porto Rico was convened in accordance with the provisions of the new organic act on August 13, 1917, and was adjourned on November 26 of the same year.

At this session 116 bills were passed and approved by the governor, 1 became a law without the approval of the governor because it was neither signed nor returned to the legislature within the legal term, 32 bills were returned without approval, and 11 were not approved and did not become laws because the legislature adjourned before the expiration of the legal term of 10 days after their receipt by the governor.

On February 4, 1918, the governor issued a proclamation calling a special session of the legislature to consider several matters of public interest requiring legislative action. In pursuance of this call the legislature convened on February 6 and adjourned on February 16, 1918. At this special session 27 bills were passed and received executive approval. Among the 144 laws enacted at these two sessions were many of real importance. First, a number of revenue laws were enacted to increase the revenues of the insular government in substitution of the revenues lost through prohibition. These were act No. 59, "An act to provide additional revenue by an additional tax on incomes"; act No. 31, to regulate the collection of fees for public documents executed before a notary; act No. 30, to impose taxes upon motor vehicles, pianos, diamonds, etc.; act No. 32 to regulate fees imposed for registration of titles to land; also act No. 69, to regulate the sale of alcohol and drugs for medicinal, sacramental, industrial, and scientific purposes; act No. 70, defining public service companies and providing for their regulation; act No. 28, to authorize the issuing of bonds for the purpose of constructing houses for artisans and laborers; and joint resolution No. 12, appropriating \$600,000 for the purpose of reimbursing the Federal Government for part of the cost of dredging San Juan Harbor and filling swamp lands, property of the insular government.

## EXECUTIVE.

## PROCLAMATIONS AND EXECUTIVE ORDERS.

Formal proclamations and executive orders, including rules and regulations prepared by the insular board of health and approved by the Executive Council in accordance with the sanitary law, were promulgated in the form of administrative bulletins, as follows:

- No. 130. October 20, 1917; Liberty day proclamation.
- No. 131. October 24, 1917; Prayer day proclamation.
- No. 132. November 22, 1917; Thanksgiving proclamation.
- No. 133. December 12, 1917; executive order increasing per diem allowance to officials and employees of the insular government.
- No. 134. January 8, 1918; promulgating emergency sanitary rules and regulations concerning production and sale of food products.
- No. 135. February 4, 1918; proclamation calling a special session of the legislature.
- No. 136. March 15, 1918; promulgating amendments to sanitary rules and regulations concerning bakeries, baking processes, and sale of bread.
- No. 137. March 15, 1918; promulgating amendments to sanitary rules and regulations concerning removal of corpses, cemeteries, burials, disinterments, and cremations.
- No. 138. April 2, 1918; promulgating amendments to sanitary rules and regulations concerning transmissible diseases.
- No. 139. April 2, 1918; promulgating amendments to sanitary rules and regulations concerning plumbing and sewerage and gas fitting.
- No. 140. April 12, 1918; executive order promulgating enforcement in Porto Rico of section 15 of act of Congress approved August 10, 1917.
- No. 141. April 24, 1918; Liberty day proclamation.
- No. 142. May 18, 1918; Red Cross week proclamation.
- No. 143. May 28, 1918; proclamation setting apart as insular forests certain mangrove swamps.
- No. 144. June 7, 1918; promulgating amendments to sanitary rules and regulations concerning tenement houses.
- No. 145. June 28, 1918; military registration proclamation.

## PARDONS AND PAROLES.

During the fiscal year 1917-18 the governor received 316 petitions for clemency.

The following statement shows the number of petitions received and the action taken thereon:

## Applications for clemency granted:

Full pardons.....	6
Conditional pardons.....	50
Paroles.....	21
Sentences commuted.....	2
Remission of costs.....	1
Political rights restored.....	8
	88
Denied.....	157
Filed without any consideration.....	51
Cases in which terms of sentence expired during investigation and consideration.....	3
Pending on June 30, 1918.....	17
<b>Total.....</b>	<b>316</b>

## HEALTH AND SANITATION.

Not only was the work of this department greatly increased by the necessary war work already referred to, but also by the transfer by the legislature of the charity schools from the department of education to the department of health.

A strong effort was made to discover and put into effect some means to reduce the death rate. A slight falling off was reported from the high figures of last year, which were 28.5 per thousand. For the year under discussion it was lowered to 27.7. More than 62 per cent of this high mortality was due to infant mortality (children under 5 years of age), tuberculosis, malaria, and hookworm. Special efforts are now being made by the department in close cooperation with the insular board of health to lower the figures as to all four of these major causes of mortality. Close attention is being given to milk supply to check infant mortality.

The erection of an antituberculosis hospital, heretofore delayed by injunction suits, is now being pushed rapidly forward. Arrangements for hospitals and stations for treatment of malaria and hookworm are also rapidly approaching completion, and quick results are hoped for. It has been found necessary to remove the small leper colony from Cabras Island because of the noise and dampness of this restricted site exposed to the surf of the sea. A new site will be provided for by the next legislature. A way has been found also through the cooperation of the War Department by which we hope to relieve the worst blot upon the sanitary escutcheon of San Juan by removing the awfully insanitary houses crowded together upon the mud flats of Puerta de Tierra to some other site, until these lowlands may be filled and urbanized in a sanitary manner.

There were no serious epidemics during the year, except a widespread development of measles and a slight outbreak of frambosia, or buba, both of which were brought under control by the end of the year.

There were 34,555 deaths and 43,261 births, a decrease of the former by 384, and an increase of the latter by 1,002, as compared with last year's figures.

#### PUBLIC ASYLUMS.

*Insane asylum.*—Owing to war conditions the transfer authorized by Act No. 48 of our legislature has not been effected, and this asylum still continues in its old location, which, as has been stated and repeated in previous reports, is entirely inadequate and unfit for the purpose for which it is used. As a change is not now possible, certain improvements should be carried out immediately in the infirmary to permit the isolation of various cases of tuberculosis existing among some of the patients, as well as some repairs in the wooden floors of the departments used by the men and women and the painting of the building.

The total number of patients on June 30, 1918, was 473. This figure represents an increase of 52 over the previous year. One hundred and sixty-seven men and 90 women were admitted during the year, making a total of 257. On the other hand, 52 men left cured, 27 were discharged upon request of relatives, and 53 died, making a total of 132 men; 36 women left cured, 25 were discharged upon request, and 12 died, making a total of 73 women, and a grand total of 205 cases discharged of both sexes.

The mortality during the year has been about 13 per cent. This great number of deaths is due chiefly to the pitiful physical condition in which many lunatics arrive at the asylum from hospitals and jails in the island, for frequently patients are admitted who have spent

many days awaiting admission to the asylum and are confined in the jails under very painful conditions.

Many important improvements have been made in this institution. The reception room used by the families visiting pay patients has been repaired, an ice box has been obtained for the refrigeration of the milk, a gasoline water pump has been installed, and the iron kitchen range has been substituted for a new one of reinforced concrete and fire bricks. The work of screening the doors and windows has also been commenced to make them fly proof.

No disease of an infecto-contagious nature has been reported during the year.

*Blind asylum.*—The number of patients in this institution on June 30, 1917, was 80. During the fiscal year 1917-18, 187 patients were admitted and 174 discharged, thus leaving a total number of 93 at the close of the year on June 30, 1918. The number of operations performed was 102, there being recorded 283 cases of intercurrent diseases and 6 deaths. There were 144 curable cases admitted during the year and 43 really granted admission as incurable. During the period covered by this report 112 patients left cured, 56 left improved, and 6 died. The number of inmates remaining in the asylum on June 30, 1918, was 31 men and 26 women subject to treatment and 26 men and 10 women incurable, making a total of 93.

#### CHARITY SCHOOLS.

Both the Boys' Charity School and the Girls' Charity School, according to the reports of their superintendents, published elsewhere in this volume, have had a good year of work. They were both full to the capacity of their buildings, namely, boys 276, girls 175, total 451. The school work, in which much attention is given to practical education for both sexes, was successfully carried and a large percentage of the pupils was promoted in all the grades.

#### INSULAR BOARD OF HEALTH.

In accordance with a law passed by the legislature and approved November 19, 1918, authorizing and directing the insular board of health to compile a sanitary code for Porto Rico and submit it for approval to the next legislature, considerable attention has been devoted to this subject by the board during the past year. The work of compilation has been subdivided and distributed to the various members of the board. Meanwhile upon recommendation of the governor a work compiled by Dr. Ramón A. de Torres has been adopted as a "Provisional Compilation of the Sanitary Rules of Porto Rico."

The board has strongly supported and given helpful counsel to the moral and physical sanitation of San Juan and other cities adjacent to Camp Las Casas; also taken much interest in the project of securing an antituberculosis hospital, and after investigation has strongly recommended the removal of the leper colony from Cabras Island.

The board has also during the year prepared and recommended various sanitary rules and regulations and amendments to existing regulations, some of which have been adopted and some are now under consideration by the executive council. These regulations cover a wide range of subjects such as the production and sale of milk,

bread and other foods, transmissible diseases, cemeteries, plumbing, water supply, tenement houses, inspection of schools, dairies, etc. The board has worked throughout the year in close harmony with the department of health.

### INSTITUTE OF TROPICAL MEDICINE AND HYGIENE.

The work performed by the institute has increased considerably as compared with other years and has become more complicated.

The results obtained in some cases of sprue became known throughout the island and this fact brought many people in contact with it. One of its members made 14 X-ray examinations of the digestive organs in cases of sprue and his conclusions will be made known in an article soon to be published.

The institute has continued to render valuable assistance to the medical profession in the island both in corroborating or verifying diagnosis and in looking for solution of many complex questions of tropical medicine.

The laboratory is well equipped and was for this reason in a condition to offer to the Medical Corps of the Army an active assistance in all kinds of investigations until the establishment of the laboratories at the base hospital. Then the work continued along the line of serological diagnostics.

Last year the services of Dr. Ashford, who was transferred to France, were lost to the institute and this year we have to add the loss of Dr. Pedro Gutierrez Igaravidez, who left the work and joined the base hospital, and Dr. C. Michell, who was transferred to the Virgin Islands.

In order to enable the institute to continue its work Dr. Rafael Bernabe was appointed as temporary assistant physician and immediately took up the work.

Out of 217 cases treated in the dispensary 143 were of sprue, and if it is considered that each case of sprue made eight visits it will be found that in this year more than 1,200 consultations have been attended to. In addition to the above the institute made 4,257 analyses, which speaks well of the efficiency of this branch of the service.

The members of the institute lost no opportunity to make known the results of their investigations. At the meeting of the Medical Association of Porto Rico in December, 1917, they presented and discussed two papers on the subject of pathology and tropical hygiene in connection with malaria. In February of this year another conference was held in the rooms of the Ateneo Puertorriqueño and the institute presented a topic on the "Meaning, importance and future of the Institute of Tropical Medicine and Hygiene of Porto Rico."

At both of these meetings new accomplishments, new laboratory methods for more exact diagnosis, and other themes of importance were presented and discussed.

### INSULAR POLICE.

The insular police force of Porto Rico have during the past year given renewed and remarkable evidence of efficiency and patriotism. On the one hand the war has greatly increased the work of the force as they were constantly called on for extra services in the matter of



military registration, control of spies, alien enemies and pro-German propaganda, and in fact every form of war activity. On the other hand the draft made by the military service upon the personnel of the force, hundreds of whom have entered the training camps and the National Army as well as the Navy, was so great that it was quite difficult to keep the ranks filled with men of capacity and training sufficient to perform all of the services with the usual efficiency.

Nevertheless, this difficult feat seems to have been successfully achieved and much credit is due therefor to the chief of police and the police commission.

The entire force consists of 727 men, including officers and men of all ranks, as well as detectives and civilian employees. The total expenditures for the fiscal year 1917-18 were \$456,333.93. The number of arrests and cases tried for crimes of various sorts was considerably reduced under the figures for the previous year and also under the average for the last eight years. The chief of police attributes this reduction to the effects of prohibition of intoxicating liquors which was in force during the four months of the fiscal year. Other good effects also have been noticed by the police all over the island. Of all cases tried 87 per cent were convicted.

The strike movement through the eastern part of the island made more difficult and complicated the duties of the police, as is usually the case, but in general the year has been passed with peace and order almost everywhere.

Complete statistics with reference to the work of the insular police force will be found in Exhibit C of Appendix I.

#### CIVIL SERVICE COMMISSION.

During the year covered by this report, 1,210 applications for examination were received, representing an increase of 54 over last year's figures. Of the above number 1,050 persons were examined and 500 or 47.62 per cent passed.

The commission also examined 252 persons for the United States Civil Service Commission. Of these, 190 took examinations for appointment in Porto Rico and 138 or 72.63 per cent passed.

Two hundred and fifty-seven appointments were made by the commission as against 173 for the previous fiscal year.

Greater difficulty than ever before has been experienced in filling positions of stenographers and typewriters. During the year 95 stenographers were examined and only 26 passed. In the examinations for typewriters, 33 passed out of a total number of 73 applicants. The scarcity of competent stenographers and typewriters has been greater than formerly on account of the draft.

Legislation was enacted by the insular legislature affecting the civil service. An act was passed to include in the classified civil service the employees of the experiment station and bureau of agriculture of the department of agriculture and labor.

There were also passed acts to reorganize the Carnegie Library, to amend section 5 of the original civil service act, and a joint resolution to include teachers in the classified service.

Of a total number of 5,647 positions we have 1,314 in the classified service and 4,333 in the unclassified service.

Statistics concerning the work of the commission will be found in Exhibit E of Appendix I.

### BOARD OF MEDICAL EXAMINERS.

During the period covered by this report 26 physicians, 20 minor surgeons, 40 nurses, 4 optometrists, and 1 midwife made application to this board. Of the above number 20 physicians, 19 minor surgeons, 30 nurses, and 3 optometrists were licensed to engage in actual practice on the island.

The board, after careful consideration and consultation with the attorney general of Porto Rico, denied the request of one doctor for a license to practice medicine in Porto Rico without submitting himself to the regular examinations. The license of another physician was suspended because of conviction for crime in the courts.

This board has resolved not to admit after April, 1920, for examination for minor surgeons and nurses applicants who do not possess the eighth-grade diploma and a high-school diploma for midwifery.

On the recommendation of the board, Drs. F. Matanzo and L. A. Saliva were appointed to fill the vacancies occasioned by the resignation of Drs. P. Gutierrez Igaravidez and J. N. Carbonell.

### BOARD OF PHARMACY.

This board has examined during the period covered by this report 30 candidates for license to practice as druggists on the island.

The board has reported to the attorney general the existence of drug stores whose owners have not met the requirements of the law.

Four examinations have been held by this board, on September 24 to 27, 1917; March, 1918; April, 1918; and June, 1918.

Applications and correspondence have been attended to with the usual interest and zeal.

### BOARD OF DENTAL EXAMINERS.

In August and November, 1917, and February and May, 1918, this board has conducted examinations in accordance with the law and has examined 12 applicants, all of whom have been duly authorized to engage in the practice of their profession here.

At the request of the War Department, this board has examined candidates for the Dental Reserve Corps. Many were duly examined, and of these 10 have already been detailed at Camp Las Casas with rank of first lieutenants.

Owing to certain deficiencies in the present law the board has not been able to proceed against those who have violated its terms.

### BOARD OF TRUSTEES OF THE UNIVERSITY OF PORTO RICO.

The University of Porto Rico comprises the College of Liberal Arts, of Law and of Pharmacy, the University High School and the Practice School, which is attended by elementary pupils, all located at Rio Piedras, and the College of Agriculture and Mechanic Arts, situated at Mayaguez.

The whole institution has been greatly affected in all of its departments by war conditions during the past year. Many members of the university body, both of the faculty and students, have gone into the military service, and many more of the students have entered the teaching profession to supply the places of the numerous teachers in the public schools who have volunteered or been drawn into the service of arms. To all of these demands upon its patriotism the

institution has responded loyally, and in addition joined heartily in every form of war activity, such as Red Cross work, Liberty loan campaigns, food conservation, and general propaganda of every sort. At Rio Piedras advantageous improvements have been made during the year in buildings, grounds, and material equipment, but nevertheless the institution is still sadly in need of more and better buildings. Progress also has been made in enrollment and in internal organization as well as articulating more closely the university with the public-school system.

For the College of Agriculture, at Mayaguez, last year was a most eventful period. From the nature of its work and the character of its training, being both military and agricultural, the college was called upon to make extraordinary contributions of men to the military service and the food production campaign. All of these demands were fully met, though at considerable sacrifice. All of the members of the senior and junior classes of sugar classes were sent out to help in the laboratories of the sugar companies. This college also is in sore need of additional buildings.

#### BOARD OF TRUSTEES OF THE CARNEGIE LIBRARY.

The board of trustees of the Carnegie Library has been reorganized in accordance with the act of the legislature approved November 22, 1917.

There have been added to the library during the year by purchase and gift 3,213 books in both Spanish and English and about equally divided between fiction and nonfiction.

The number of patrons is constantly increasing, reaching a daily average of 180. The benefits of the institution have been increased by allowing persons in various towns to take out and use the books, but a more important method of extending the sphere of its usefulness has been found in the establishment of a traveling library system, which has become quite popular and will doubtless be extended still further during the coming year. Means have been adopted for acquainting the people of the island generally with the facilities for reading and culture offered by this great public institution, and many lectures, exhibitions, and meetings of various sorts take place in its attractive rooms. Its usefulness and popularity are steadily growing.

The appropriations for its maintenance are \$15,440 annually.

#### INSULAR GOVERNMENT FINANCE.

As shown in the report of the treasurer published elsewhere in this volume, the most important work of the department of finance during the past year was the rehabilitation of the revenue system so as to compensate the treasury for the losses of revenue due to prohibition. This was accomplished by the enactment by the legislature of new tax laws or by amendments to existing laws so as to increase the revenues by about \$1,000,000 annually. The most important of these measures was a new graduated income-tax law to take effect July 1, 1918, and which it is estimated will produce revenue to the amount of \$700,000 annually. In addition to this new taxes were imposed upon certain articles of luxury and a new graduated scale of fees arranged for notarial documents and some other minor taxes.

The total revenues for the fiscal year 1918-19 are estimated by the treasurer at \$6,057,000. The available cash balance at the end of

the last fiscal year was \$708,540. This sum will be increased by various sums due from the Federal Government, municipalities, taxes paid under protest, and other sources to about \$1,200,000. On the other hand it will be noted in the report of the treasurer that the outstanding appropriations to be reckoned against this available cash balance plus the estimated receipts for the year 1918-19 aggregate \$8,918,384. This shows an apparent deficit of \$1,656,332 estimated for the year ending June 30, 1918, notwithstanding the available cash balance of \$1,200,000 for the year previous. But this deficit is only apparent. This peculiar situation has been brought about by the fact that under certain provisions of the new organic act, as interpreted by the legal officers of the Government, we have been compelled to count as active all of the old no-fiscal year appropriations standing unrepealed upon the statute book. Some of these were enacted six or eight years ago and had been continuously set aside by the governor on account of lack of funds and were regarded as a contingent liability only.

Under the old organic act this procedure seems to have been entirely legal and proper, but according to the present interpretation of the new act all the old no-fiscal year appropriations must be treated as real liabilities and liquidated in the chronological order of their enactment.

This situation can be remedied in part at least by the legislature through repealing some of the old no-fiscal year appropriations, but these clauses of the organic act as thus interpreted place unnecessary and embarrassing restrictions upon both the legislature and the administration in dealing with no-fiscal year appropriations. Expenditures of this character frequently require two or three years for carrying the operations to completion, and it seems unfortunate to be compelled to tie them up so rigidly to some one fiscal year as to embarrass the government in its other expenditures.

The following summary of the transactions of the insular treasury is intended to present in the most concise form possible a general view of the income and expenses as well as the receipts and disbursements from all sources and for all purposes during the fiscal year; it also shows the total cash on hand and the amount available for expenditures at its close.

*Summary of the transactions of the insular treasury for the fiscal year 1917-18.*

Customs receipts during the year amounted to.....	\$370,000.00
Internal-revenue receipts accruing to the insular government, made up of \$426,278.19 from excess over legal municipal and school board maxima, \$1,039,685.40 from United States internal revenue, \$229,024.24 from property taxes, \$566,831.93 from income taxes, \$52,706.06 from inheritance taxes, \$1,051,300.09 from tobacco tax, \$1,086,445.69 from tax on spirits and liquors and for other taxes aggregated.....	4,452,271.60
Receipts from fees, fines, and other miscellaneous sources amounted to.....	603,807.68
<b>Making the total actual revenue collected on account of the fiscal year 1917-18.....</b>	<b>5,426,079.28</b>
There also reverted to and were paid into the treasury on account of general fund, representing repayment of loans to municipalities and school boards, repayment of unexpended funds to appropriations, sales, refunds from the working capital account of the bureau of supplies, printing, and transportation, and various other minor transfers, aggregating.....	1,111,589.33

Making the total insular treasury receipts on account of general funds available for expenditure under appropriations .....	\$6, 537, 668. 66
Receipts on account of trust funds, representing \$2,388,910.25 in property taxes on account of municipalities and school boards, \$102,227.81 from sale of harbor improvement bonds, \$45,968.52 from court fees and fines, \$31,614.43 from harbor and dock fees, \$2,793.32 from interest on bank deposits, \$355,834.08 in bond redemption tax, \$210,831.52 in property taxes paid under protest, and \$2,611,528.96 from miscellaneous sources and transfers, amounted to.....	5, 749, 708. 89
Bringing the total receipts of the treasury for the year up to.....	12, 287, 377. 55
This amount, added to the cash in the treasury at the close of 1916-17.	4, 105, 845. 55
Make the total to be accounted for.....	16, 393, 223. 10
On account of appropriations by the legislative assembly there were expended during the fiscal year:	
For legislative expenses.....	\$114, 635. 27
For all services, public works, improvements, and expenses incurred by and effected through the various branches of the executive department of the insular government.....	4, 437, 432. 84
For the support of the judiciary.....	421, 188. 48
For miscellaneous purposes.....	256, 133. 16
Or a total of.....	5, 229, 389. 75
Further disposition of available funds in loans to municipalities and school boards, transfers and repayments to appropriations, including repayable advances to the working capital fund of the bureau of supplies, printing, and transportation, and municipal and school board bonds redeemed and sold, amounting to.....	1, 181, 214. 77
Brought the total amount expended and disposed of up to.....	6, 410, 604. 52
Reducing the amount at the disposal of the government to.....	9, 982, 618. 58
Disposition of trust funds, represented by payments to municipalities and school boards on account of taxes collected for them of \$1,480,531.67; expenditures from irrigation fund, \$544,170.21; other expenditures, repayments and transfers, \$3,496,468.27; in all aggregating.....	5, 521, 170. 15
Reduced the amount to the credit of the government at the end of the year in available resources to.....	4, 461, 448. 43
Segregating from this amount representing funds held in trust for specific purposes.....	3, 752, 908. 12
There remains available for expenditure under legislative appropriation.....	708, 540. 31

#### OUTSTANDING BONDED INDEBTEDNESS.

The total bonded indebtedness of the insular government was reduced during the year by \$130, 000, as follows:

By the sale of \$100,000 of the San Juan Harbor improvement bonds the total debt was increased to \$9,380,000. During the same period there were redeemed \$230,000 of previous issues, thus reducing the total island debt to \$9,150,000.

The limit of indebtedness under the Jones Act on the basis of present assessed valuation is somewhat in excess of \$16,000,000, so that the above amount of bonded indebtedness is still well within the limit. However, an analysis of the above bonded indebtedness will show that nearly three-fourths of the total amount is not in reality a debt against the revenues and property of the insular government, because it is amply secured by other property or revenue,

which will secure its payment without any burden upon the revenues of the insular government. This will be made clear by the following analyzed statement:

The entire bonded indebtedness outstanding on June 30, 1917.....	\$9, 150, 000
Irrigation bonds secured by special tax upon the lands irrigated.....	\$4, 950, 000
Bond secured by collateral bonds of the municipalities and school boards.....	1, 225, 000
Bond secured by the San Juan Harbor dues.....	600, 000
<b>Total.....</b>	<b>6, 775, 000</b>
<b>Balance.....</b>	<b>2, 375, 000</b>

Subtracting, therefore, from the total outstanding indebtedness all those forms of bonds for which the insular government holds collateral security sufficient to insure their payment, there remains a balance of only \$2,375,000 for which the insular government is alone responsible and funds for the payment of which must be provided out of the general revenues.

#### MUNICIPALITIES.

The total receipts of the municipalities from all sources, excluding loans and bond redemption taxes, amounted to \$2,003,657, and their total expenditures to \$2,059,509. There was a slight excess of expenditures over those of the previous year, but not nearly as much as might have been expected in view of higher cost of materials and supplies of all sorts. The financial condition of the municipalities in the main is reported as excellent, and it is a tribute to their good management that almost all of them closed the year with a surplus in spite of the abnormal conditions. Owing to the legal tangle in which the insular government was involved because of its old appropriations, as has been already explained, the policy of making loans or advances to the municipalities for civic improvements had to be temporarily discontinued, and several of them have availed themselves of the authority given them by the executive council to contract loans with banks and private individuals for the construction of proper public improvements.

#### EDUCATION.

The total enrollment in the public schools was 142,846, exclusive of the charitable and correctional schools. Of these 1,257 were enrolled in the University of Porto Rico, 84,570 in rural schools, 50,060 in elementary urban schools, 3,346 in secondary schools, and 3,613 in night schools. In addition to the enrollment in the public schools 7,248 attended private schools and a considerable number were sent to schools in the United States.

The total enrollment in the public schools was 33.1 per cent of the estimated total population of school age in the whole island. Of the school population in the urban centers 59 per cent were attending school; of those living in the rural barrios only 25 per cent were actually enrolled. Too much emphasis, however, has been laid upon these comparative percentages and misleading results have been obtained.

The fact that only 25 per cent of the children of school age in the rural districts are now actually enrolled in the schools does not imply that the other 75 per cent have never been in school and are therefore illiterate. It must be remembered that the course of study in the rural schools extends over four years only, while the legal school age covers a period of 14 years in a child's life. It is undoubtedly true, therefore, that many of the older children of school age who are not now in school have already been in school and probably finished the course.

In the towns where the graded schools have a course of study extending over eight years, it is easy to see that a larger percentage of the children would naturally be enrolled, because, as a rule, all the children would continue on the rolls of the schools twice as long as the rural children. Moreover, a considerable number of the rural children living within reach of the urban school attend the graded schools in the towns and thus swell the enrollment in the urban centers and affect the relative percentages. The schools of Porto Rico were conducted in 1,712 different school buildings, representing 2,845 classrooms. Of these, 540 are public property and 1,172 are rented.

During the past year 32 new sites have been acquired and 26 school buildings have been completed, while 13 more are in course of construction.

There were employed 2,715 teachers, 909 of whom were men and 1,806 women. There were 174 from the continent and 2,541 natives of the island.

#### AGRICULTURE AND LABOR.

This important and new department of the insular government has been seriously handicapped in its work for agriculture by the impossibility of securing men for several positions which required training. This has been due to the war and the demands for military service both here in the island and on the continent. The men desired for this service could not be secured at this time either in Porto Rico or the United States. Notwithstanding this difficulty, the department has organized its work upon broad and practical lines, and has proceeded with it in the best manner possible under the circumstances. On the side of labor, the department has continued its labors to protect and promote the interests of all laborers throughout the island by recommending labor legislation and by enforcing all existing laws for the protection and assistance of laborers.

#### AGRICULTURE.

An act was passed by our legislature in November, 1917, creating a board of agriculture in each municipality. This law went into effect in June, 1918, when the governor appointed the members of the local committees upon recommendations of the municipal councils. The purpose of this act is to encourage and develop agriculture in Porto Rico in the various towns. The formation of these committees affords an opportunity of usefulness to the department by correspondence with the farmers through their respective boards.

A forestry act was also passed and the governor, in compliance with its terms, issued a proclamation setting apart as insular forests all the mangroves on the coast of the island of Porto Rico and ad-

jacent islands belonging to Porto Rico. The commissioner of agriculture and labor immediately drafted regulations prohibiting the felling and burning of all trees found in the zones included in the proclamation.

By virtue of an act organizing the services of agriculture and providing for the appointment of 2 agricultural district inspectors and 10 district assistant inspectors, the department has divided the island into two agronomic districts and assigned an inspector to each of said districts. In the first district there are 30,842 farms, with a total acreage under cultivation of 739,813, and in the second district 26,147 farms, with 805,928 acres. Out of the number of assistant inspectors authorized by the law, only five have been appointed; the remaining number is vacant for lack of personnel meeting the requirements of the law.

A cadastral topographic map of Porto Rico is greatly needed and its preparation is strongly recommended.

The experiment station has continued its work with interest, directing its activities especially to the inspection and quarantine of plants brought into Porto Rico; laboratory experiments to improve methods for control of insects; field trips of investigation; and general office and laboratory routine work.

The division of agronomy has devoted most of its time to research work in cane breeding, and the division of pathology and botany to studies of the "mottling disease" of the sugar cane, which has appeared in many parts of the island and has already caused serious loss and great apprehension.

#### LABOR.

The bureau of labor has been actively working with its limited means and powers to reduce to a minimum the antagonism existing between labor and capital. Living conditions of laborers, as well as sanitary conditions at the shops and factories have been carefully investigated, resulting in many improvements and suggestions for further improvement.

In the urban zone, with exception of the laborers employed in the cigar factories and in the construction of buildings, wages continue to be much the same. In rural zones, especially in the sugar sections, agricultural laborers in most parts of the island have received increases in daily wages of 25 to 30 per cent. In addition to this increase in daily wages, some sugar factories have paid to all their laborers a 15 per cent bonus, which was distributed at the end of the grinding season.

Strikes in different kinds of labor took place during the year in the cigar industry, agricultural workers, motormen and conductors of electric cars, street cleaners of San Juan, workers in sugar-cane factories, and others of minor importance. Some of these strikes failed in their purpose, while others resulted in increases of wages or betterment of conditions.

In general, it can be said that all labor disputes could have been settled if intervention outside of laborers had been excluded. The bureau could not officially intervene in all controversies because of lack of authority to do so. For this reason legislation broadening the powers of the bureau would be helpful and tend to a more efficient service.



## AUDITING AND ACCOUNTING.

There have been no material changes during the year in the system of accounting established several years ago. This system has been found sufficiently comprehensive and flexible to be applied without alteration to the new activities and responsibilities devolving upon the auditor's office in accordance with the new organic act. The most important of these new duties was the establishment of a system for the supervision of the various financial activities of the municipalities and school boards of the island, and during the year great progress has been made in getting into touch with the local officials, who have in most instances shown a commendable spirit of cooperation in carrying out the provisions of the new act.

The attention of the auditor has also been largely engaged in the interpretation of the different acts of the last legislature in their relation to the work as provided by the new constitution. The most difficult matter under this head was that of the no-fiscal-year appropriations in connection with the last paragraph of section 34 of the new organic act. This matter has already been discussed in this report under the caption of "Insular finance." Other appropriations also presented difficulties of interpretation, all of which have been handled in cooperation with the office of the attorney general and in a manner that seemed to be most judicious under a fair interpretation of the law.

A complete comparative statement is given in the auditor's report of increases and decreases of expenditures in the various departments of the new government as compared with the old régime, with explanatory comment which is both interesting and illuminating.

The new work of the office required the creation of a new division of audits.

The report of the auditor, with all necessary tables and exhibits, will be found in Appendix IV.

## ·PUBLIC WORKS—ROADS AND BUILDINGS.

## ROADS AND BRIDGES.

During the last fiscal year a large amount of road construction was undertaken; 10.7 kilometers of new roads were built and 4.5 kilometers of old roads were reconstructed, which brings the total of completed macadamized government roads on the island up to 1,189.3 kilometers, of which 914.3 were built under the American administration.

Five hundred thousand dollars of the \$2,000,000 worth of road bonds authorized by the legislature in 1916 were sold and the proceeds made available for the construction of roads and bridges early in the year in accordance with the new road program.

The total expenditure for the maintenance, repair, and construction of insular roads and bridges during this year was \$1,040,913. Of this amount, \$608,886 was for maintenance and repair, \$297,987 for road construction, \$119,564 for bridges and culverts, and \$41,525 was expended on road surveys in connection with the location and construction of the new roads contemplated under the bond issue referred to above.

At this writing arrangements are being made for the sale of a second installment of \$500,000 worth of these bonds in order to continue this important and urgent work of road and bridge construction on the island.

#### BUILDINGS.

The work of maintenance and repair of public buildings devolves upon the department of the interior and has greatly increased during the past year. The division of public buildings has been called upon to aid the municipalities and school boards of the island in the design and construction of all sorts of buildings, varying in type from school-houses, town halls, and jails to public market places, slaughter-houses, and municipal stables. This was in addition to its important duty of looking after the upkeep and repair of the buildings belonging to the insular government proper, some of which were erected more than 300 years ago. The roofs of these old structures especially are constantly needing repair, and while the annual appropriation of \$50,000 for the maintenance and repair of public buildings has done much to maintain the government buildings in a condition suitable for occupancy, still it is entirely insufficient to keep them in complete repair. They represent a property value of approximately \$2,000,000, and with such a meager appropriation it is becoming more and more difficult to maintain them in proper condition, and unfortunately our legislature has not felt that it could conveniently appropriate a larger sum for this purpose.

Important alterations and additions were made to the reform school at Mayaguez and additional dormitories were added to the boys' and girls' charity schools at San Juan.

School buildings have been erected during the year in different parts of the island ranging in cost from \$1,000 to \$200,000. Plans are now being prepared for the San Juan High School, which building when completed will cost in the neighborhood of \$400,000. Two new school buildings have been erected in Santurce this year, at a cost of \$110,000 and \$60,000, respectively, and there will soon be completed and opened to the children a large graded and technical school in San Juan which will cost about \$170,000, and the construction of many more buildings will be undertaken or finished during the coming year, including a new high school at Ponce, at a cost of \$50,000, which was appropriated by the last legislature for this purpose.

The total amount expended on the construction of public buildings up to the end of the present fiscal year was \$544,102, and the completed projects of work to be undertaken as soon as funds are made available represent a total estimated expenditure of \$218,571. Several other projects are in course of preparation which would involve an outlay of more than a million and a half dollars.

#### PUBLIC LANDS.

The survey of lands belonging to the insular government continues to progress slowly but effectively, and this year the total number of cuerdas surveyed reached over 6,400. These lands can be easily leased as soon as the titles thereto are perfected and recorded. In addition to the surveying of these public lands the department of the

interior has conducted the survey of some 3,200 cuerdas of private lands during the present year. A large amount of work of this nature was performed for the various municipalities and school boards of the island. There remain about 100,000 acres of public lands to be surveyed, and when this has been accomplished a handsome income should be derived therefrom by the insular government, which is at present receiving an annual income of \$16,897 from the rental of public lands leased to private concerns and individuals. A careful revision of the laws relating to the leasing, sale, and use of these public lands ought to be made by the legislature in order to harmonize them by the elimination of conflicting, obsolete, and unnecessary provisions.

### INSULAR TELEGRAPH.

The volume of business handled by the insular telegraph and telephone system during the twelve months just passed was larger than in any previous year since this service was taken over by the insular government. The total cash receipts during the year were \$96,825, or an increase of nearly \$10,000 over last year, although the net profits, amounting to \$3,695, were somewhat less than the previous year. This is due to the high cost of materials and the larger quantity of the same which was required on account of the considerable increase in business caused in part by the extra work performed in repairing the damage done by the cyclone in August, 1916, necessity for a greater number of employees, and the extension of the system. Then, too, some of the new offices opened during the year were operated at a loss, while expenditures have greatly increased, as stated. But in spite of the abnormal conditions which existed the total income for the year was \$113,172, or \$19,200 more than the previous year. The total number of messages transmitted during the year was 269,660, or 16,740 more than last year. This increase in the number of messages transmitted is in a great measure due to the service required by the local boards of the selective military service established all over the island and the opening of the cantonment and training camps at San Juan. No charge is made for this service to the Federal Government where the messages are of an official nature.

The number of telephone offices in operation has reached 75, with 5 branch offices in the island; the volume of business has greatly increased as well as the number of telephone subscribers. At the close of the fiscal year there were 14 telegraph and 18 telephone lines in operation, 32 in all, with a total mileage of 1,574.75, as compared with 1,544.75 miles for the previous year.

A full account of the operations of this important branch of the government service will be found elsewhere in this report.

### MOTOR VEHICLES.

There has been a large increase in the number of motor vehicles registered in the department of the interior during the past year, which has resulted in an increase in the receipts from fees of \$11,187 over the figures for 1916-17. The entire proceeds from the various forms of taxations in licenses upon motor vehicles reached a total of \$89,669.43.

At the close of the fiscal year 1917-18, there were in force 4,529 automobile and truck licenses; 210 motorcycle licenses; 4 nonresident automobile licenses, and 20 dealers' licenses; and there were in operation 3,422 private automobiles; 842 public automobiles, 60 municipal automobiles, 80 private and 125 public trucks, and 210 motorcycles, making a total of 4,739 motor vehicles.

### HARBORS AND DOCKS.

Contrary to what occurred last year, the necessities of the war caused a decrease of 18.6 per cent in the number of vessels arriving at Porto Rican ports and a corresponding decrease of 25.2 in the gross tonnage. The total number of ships entered was 1,550, with a total tonnage of 3,810,094, 512 of which entered at the port of San Juan and represent a gross tonnage of 1,308,937. This falling off in clearings naturally caused a considerable decrease in the receipts from this source, which aggregated only \$46,389.18, or, say, more than 17 per cent less than for the year 1916-17.

### IRRIGATION DISTRICT.

The permanent irrigation was formed on July 1, 1917, including 26,752.50 acres, and has been successfully operated throughout the fiscal year. Unusually light rainfall in the first part of the year and a very severe drought in the last part made it impossible to make full deliveries of water throughout the year in the eastern district especially. For the year the total actually delivered was 129,585 acre-feet, as compared with 145,600 acre-feet delivered during the previous year. Although there was a limited amount of water and the reservoirs became at one time entirely empty, yet the amount of water delivered was sufficient to keep the cane on most of the acres in cultivation in fairly good condition. Without the irrigation system the losses would have been immense.

The hydroelectric system in connection with the Carite Reservoir was kept in continuous operation throughout the year in a very successful manner. The total income for the year from the sale of power was \$71,792, and additional contracts have been made which will raise the total income to about \$107,000 per annum. Two important improvements in the irrigation system have been authorized by the legislature and will be undertaken promptly as soon as the proceeds of the sale of the bonds shall have been received. These improvements are of such importance to the sugar growers in the eastern irrigation district, that they have themselves agreed to buy the \$200,000 worth of 4 per cent bonds at par and secure prompt construction.

These improvements are as follows:

1. To raise the dam and spillway at Patillas Reservoir so as to increase the storage capacity by about 3,000 acre-feet.
2. To double the capacity of the hydroelectric plant at Carite, which additional power can readily be sold for pumping water and other purposes. These two improvements will not only add large proportional revenues to the irrigation system, but will prevent the possibility of loss to the sugar crop from a drought such as occurred this year.

## JUSTICE.

The fiscal year 1917-18 has been the busiest and most important since the organization of the department. Very exceptional demands were made upon the department by the legal problems growing out of the great war, by the legal interpretations and adjustments connected with the new organic act and the legislation enacted by the first elected legislature, and also by the unusual amount of litigation in which The People of Porto Rico had an interest during the year.

The most important and interesting matter of litigation was that connected with the Territorial status of Porto Rico. In the spring and summer of 1917 the United States district court and the Supreme Court of Porto Rico decided that this island had become an incorporated Territory of the United States by virtue of the grant of citizenship to its inhabitants contained in the new organic act, and as a consequence a complete jury system was forced upon the island by the Constitution of the United States. This seemed for the moment to throw doubt upon the entire criminal procedure of the established courts of Porto Rico and possibly to make illegal every criminal prosecution conducted under the present laws in case the Supreme Court of the United States confirmed the decisions of the local courts. In order to provide for all contingencies and remedy this precarious situation the attorney general, while maintaining that the organic act did not require a grand jury, nevertheless organized grand juries in every district on common-law lines, and more than 100 indictments were returned before the matter was finally settled by the Supreme Court of the United States, which reversed the decision of the local courts in January, 1918. After the decision the Supreme Court of Porto Rico upheld the legality of the proceeding and convictions based upon indictments by these common-law grand juries.

The whole incident turned out to be an interesting experiment and threw an important side light upon the practicability of a modified grand jury system in Porto Rico.

The war work of the department of justice has been very varied and important. Perhaps the most striking was the suppression of the conditions of vice and prostitution in connection with the mobilization of the National Army from Porto Rico. This campaign began in February, 1918, is still in progress at this writing and has resulted this far in a great success. There have been and there are still immense difficulties in the path of this fundamental social reform, but it has already progressed so far that it can not fail of accomplishing its immediate purpose, and it is hoped that funds and other facilities may be found for carrying it through to a final and complete consummation which will result in a vast and permanent improvement of social conditions. Amongst other new activities caused by the war may be mentioned the important and necessary cooperation of the department throughout the island in carrying out the military registration, and in contributing from its personnel a large number of men for the training camps and the Army. In this connection an active and successful movement has been started to promote legal marriages amongst those persons who have been living for many years under the status usually known as the common-law marriage.

The enforcement of the new prohibition law has also received due attention.

## PENAL INSTITUTIONS.

The general policies outlined in the report of last year have been continued during the year under review, and have proved their general effectiveness in many ways. The prisoners have shown great interest in the war and manifested a patriotic desire to aid in war work. When the wheat-bread ration was reduced in conformity with the wheat-conservation policy of the Nation, the change was accepted by the prisoners with sympathetic interest. All of the prisoners of one jail offered their services as soldiers, and were greatly disappointed because they could not be accepted for the Army.

During the year the policy of utilizing the labor of the prisoners upon the roads and other kinds of public work has been steadily developed. In all there was performed by the prisoners a total of 167,131 days' work of this sort, which is more than twice the figures of the year 1915-16.

## REFORM SCHOOL.

This school is still crowded, owing partly to the large demands made for space for boys under sentence by the juvenile courts. The improvements and enlargements outlined in the last report have been practically completed and put in operation. The average number of boys in the school during the year was 156, but during the last six months it was about 200. This is, however, the maximum capacity and, due to the demands already mentioned, does not seem to be sufficient.

## FRANCHISES.

Nineteen franchises enacted by the executive council or the public service commission and approved by the governor during the fiscal year 1917-18 are enumerated in exhibit "D" of Appendix I herewith.

Nine of the ordinances passed were for the granting of authority to take water from the various streams of the island for the generation of electrical energy, four for the taking of water for irrigation purposes, one for the taking of water for industrial purposes, and two for the extension of railroad lines.

## PERSONNEL.

The following changes in official positions filled by presidential appointment took place:

*Appointments.*—Luis Sánchez Morales, member of the executive council, July 12, 1917.

The following changes in official positions filled by the governor took place: José E. Benedicto, treasurer of Porto Rico, September 4, 1917; Manuel Camuñas, commissioner of agriculture and labor, September 4, 1917; Alejandro Ruiz Soler, commissioner of health, September 4, 1917; Guillermo Esteves, commissioner of the interior, February 18, 1918; Ramón Siaca Pacheco, executive secretary of Porto Rico, September 4, 1917.

In accordance with existing laws, the governor during the fiscal year made the following executive appointments:

Judges of district courts, 5; fiscals of supreme and district courts, 5; secretaries of supreme and district courts, 10; marshals of district courts, 5; judges of municipal courts, 28; secretaries of mu-

municipal courts, 32; marshals of municipal courts, 31; justices of the peace, 8; registrars of property, 2; district chiefs of police, 31.

The following appointments were also made by the governor to fill vacancies in elective offices, as provided by law: Municipal mayors, 10; municipal councilmen, 82.

A number of appointments were also made upon various boards and commissions, as provided by the laws under which they were organized and the gentlemen who have accepted such appointments are entitled to an acknowledgment of the personal appreciation of the undersigned and an expression of the gratitude of the people of Porto Rico for the generous gift of their time and service to the public in attending to the duties imposed upon them thereby.

Exhibit B to Appendix I of this report gives in detail a list of the appointments made by the governor during the past year.

#### WORKMEN'S RELIEF COMMISSION.

The workmen's compensation law approved April 13, 1916, and amended April 12, 1917, was superseded by Act No. 10, of February 25, 1918. This act became effective on May 26, 1918, and brought with it many changes. The governor appointed a new commission on May 27 to continue the work of the old commission which ceased to exist by virtue of the provisions of the new law. This law, although in force on May 27, gave no powers to the commission it created to act in accidents occurring before July 1, 1918. So the new commission, composed of the commissioner of agriculture and labor, Mr. Manuel Camuñas, as chairman, and the treasurer of Porto Rico, Mr. José E. Benedicto, Dr. J. Reguero Feliú, José A. Canals, and Abraham Peña as members met for the first time on May 31 to continue the work of the old commission in settling all accidents pending and all those which occurred up to June 30.

The new law is applicable to accidents occurring on and after July 1, 1918, and is different from the former in many essential provisions. It is compulsory to all employers who employ regularly three or more workmen who are subject to the law; it is also applicable to workmen employed by the insular government in its public works and to common carriers by railroad. It also increases the compensation in cases of death and total or partial permanent incapacity.

Owing to increase of work, three accident investigators, a clerk, and a messenger had to be added to the personnel.

During the year the commission has considered 603 cases involving a total sum of \$69,620.20; 98 of these cases were old cases from 1916-17, pending at the end of that year, and the rest—505—were cases which occurred during 1917-18. The commission has settled 510 cases and left 93 pending at the close of this fiscal year.

The payments made in settled cases and those on which partial awards have been made amount to \$48,521.67. The claims made in pending cases in which partial awards have been made amount to \$21,098.53.

The liabilities assessed by the commission were as follows: On account of deaths, \$17,448.56; total permanent incapacity, \$2,956; partial permanent incapacity, \$14,484.40, and temporary incapacity \$34,731.24.

The wages as per monthly returns were \$1,866,348.68, and the total assessed premiums amounted to \$41,714.24, which, together with

\$610.98 collected on account of surcharges, fines, and sale of pay roll books to employers, made a grand total for the year of \$42,325.22. The compensations paid were \$23,229.39, estimated payments pending, \$16,391.75, and administration expenditures, \$6,166.32, making a total of \$45,787.46 and a deficit of \$3,462.24 for the year 1917-18, which, added to the deficit of \$5,111.89 of the fiscal year 1916-17, makes a total deficit against the workmen's relief trust fund of \$8,574.13.

The actual receipts from premiums for the two fiscal years 1916-17 and 1917-18 amounted to \$77,203.44, and the disbursements made during the said two fiscal years aggregated in all \$67,712.21, leaving an actual cash balance in favor of the fund on June 30, 1918, of \$9,491.23.

Although, as stated before, the deficits for 1916-17 and 1917-18 totaled \$8,574.13, it has not been found necessary for the commission to use the special fund of \$25,000 created by the law due to the fact that \$21,098.53 is pending payment. Therefore the balance in the treasury to the credit of workmen's relief trust fund on June 30, 1918, was \$34,491.23.

During the period covered by this report the commission denied 10 claims for compensation, two for lack of evidence, four because the claims were presented after the period fixed by law, three were not considered accidents within the scope of the law, and the other, a death case, because after due investigation it was found that the claimant did not depend entirely upon the earnings of the deceased for her subsistence.

Of the 510 cases that were finally settled only two were appealed to the district court, and both of them are still awaiting decision.

The compulsory feature of this law is now in litigation. The attorney general of Porto Rico has held that it is compulsory and the judge of the Federal court that it is not. Its true application therefore is still to be decided by the courts.

#### PUBLIC-SERVICE COMMISSION.

In accordance with the provisions of the new organic act the ninth Legislature of Porto Rico passed a public-service commission law which was approved December 6, 1917. This act established the commission and conferred upon it all the powers contemplated by the organic act and other legal powers deemed necessary for carrying out its important duties. In pursuance of the provisions of this law, the insular government having already provided a suitable place of meeting, the commission met on October 4, 1918, upon request of the governor. It consisted of nine members, the six heads of executive departments and the auditor as provided in the organic act, and two elected members who were duly elected at the general election on July 16, 1917.

The commission organized temporarily by choosing the attorney general as chairman and selecting its other officials as provided by law, and on October 30 the treasurer of Porto Rico, José E. Benedicto, was made permanent chairman. The first two months of its existence were devoted by the commission chiefly to formulating its by-laws and rules and regulations, and inasmuch as the public-service act did not become effective until December 12, 1917, it was



not deemed prudent to take up and determine important matters until after that date.

Since that date more satisfactory progress has been made, but nevertheless some important matters have been somewhat retarded in their final determination. This is due to the fact that all of the members of the commission are very busy men, the ex officio members because of their other official duties and the elective members because their salaries are so meager that they must devote most of their time to their private business. The commission itself suggests the advisability of a change in its composition to a smaller number of salaried members.

The total number of cases filed with the commission to the close of the fiscal year aggregated 159. Of these 120 cases were finally disposed of.

The two subjects of most importance and popular interest were the complaint against the cable companies made by the United Press Association that exorbitant rates were charged for cable service between the United States and Porto Rico. Several hearings were held and much study given by the commission and the matter was finally determined temporarily by ordering the companies to reduce their rates 40 per cent for six months. This temporary order was contested in the courts by the companies through an injunction suit against the commission. A preliminary injunction was granted and the matter is still pending. The second matter of importance was that of securing a public-service railroad around the eastern end of the island as contemplated in the old charter granted to the French Railroad Co. many years ago. This matter has been before the commission for some months. It is complicated by the conflicting interests of various sugar railroads which were constructed as private roads for hauling sugar cane and its products to and from the mill.

It is not possible for a public service to be built and maintained through this region unless these private roads surrender this business. This matter is also pending and is not easy of adjustment.

#### FOOD COMMISSION.

This commission, the origin of which has already been explained, began operations early in May, 1917, about one month after the declaration of war and four months before the formation of a similar body in the United States.

The problems before the commission were many and diverse, but after 14 months of effort the following results have been achieved:

The increase of vegetables, the control of fuel and price control of foodstuffs, the prevention of speculation in articles of prime necessity, and a better distribution of supplies.

A spirit of fostering foodstuffs and conservation in line with the work on the mainland.

The material increase in the production of foodstuffs throughout the island, not only tending to economic independence but also effecting a saving in tonnage.

A saving in wheat flour for use by the allies, which may be measured as follows: 1,400,000 pounds of bread and biscuits and about 50,000 barrels of flour.

A saving in the retail prices of bread, milk, rice, beans, corn and corn meal, sugar, and other minor articles running close to \$2,000,000.

A saving of 100 head of cattle per week through meatless days.

The commission engaged largely in business, importing rice and flour to the amount of about \$2,500,000 during the year, and in its financial transactions not losing a cent in bad debts, and actually accumulating a fund of half a million dollars without the operations of the commission having cost the island one dollar. Important aid in this part of its work was received from Gen. Frank McIntyre, of the Bureau of Insular Affairs, and from the War Department.

The commission was able to obtain the funds for its transactions from local bankers at a rate of 4 per cent, and no bonds or other forms of permanent obligations have been issued.

On April 30, 1918, the acreage planted to corn, beans, rice, and other vegetables amounted to 334,725 acres, with 91,355 acres pledged for spring planting in addition. The report of the treasurer of Porto Rico for the year 1916-17 showed the amount of acreage planted to minor crops to have been 102,575, showing an increase of over 400 per cent in acreage in foodstuffs.

Twenty-eight thousand home gardens were planted.

One thousand four hundred and ten school gardens were planted and attended to entirely by the school children, while 1,133 committees of propaganda work were formed and educated to wake up the island's people to production, and 1,435 meetings were held at which some representative of the commission was present to encourage and direct local work.

The intense cultivation of the soil saved many thousands of tons of freight transportation. The island formerly imported the large part of its beans and corn products. This was stopped, the money and savings remaining on the island.

To supervise the agricultural work of the island 35 agricultural college graduates, each provided with a horse, were employed during the whole year, each had his district, and intense cultivation was encouraged and accomplished.

To grind the great crops of corn, mills had to be introduced, and many small stores that would have been put out of business as the effect of recently introduced prohibition were enabled to become mills by small investment, and thus continue as taxpayers and producers.

The financing of municipalities and communities was a feature of its business. If seeds were not to be had, the commission furnished them, trusting the community until the crops were gathered. If meat was high, owing to local combinations, the municipalities were loaned money to enter the market, and in many cases the local combines were compelled to discontinue their practices.

Many thousands of dollars worth of seeds were bought and distributed through the schools, to be paid for from returns. The purposes of the commission were always to produce quick results along the lines of production and conservation. Silos were built to conserve feed; insects were fought to prevent premature loss; markets were built to distribute; and new methods of preparation of food were carried to the homes through the schools and domestic-science teachers.

The commission is composed of five men past the military age, who have served without any compensation whatever, and its report is printed elsewhere in this volume.

Its finances were audited by the auditor of Porto Rico.

## CONCLUSION.

The year covered by this report is one of great progress and of momentous changes for Porto Rico. The rapid transformations, economic and social, brought by the great war have been, in spite of the sacrifices entailed, in the main extremely beneficial. The large military operations of the Federal Government here in the island, including military registration, selective service, officers' training camps, encampments, etc., have been carried on in such a way as to be of immense economic, educational, and political advantage.

I would now respectfully urge upon the attention of Congress and the executive departments at Washington one or two recommendations, as follows:

(1) That the rural credit law, now confined in its operation to the continental United States, be extended to Porto Rico. This recommendation was made in my last report, but in the year that has elapsed the need for this law has been greatly intensified, especially among the coffee farmers of the mountainous parts of the island. Moreover, there has developed all over the island a strong popular interest in this subject and an ardent desire to be given an opportunity to test its benefits among the small landowners here in Porto Rico. I therefore urgently renew my recommendation that this desire may be gratified.

(2) I also recommend that the work of dredging the harbor of San Juan and reclaiming the adjacent swamp lands, for which an appropriation was made by Congress almost two years ago, be undertaken at the earliest possible date. Many considerations of urgency enter into this important project, both from the point of view of commercial necessity and that of health and sanitation of the city.

(3) In view of the importance and urgency of speeding up the program of educating the illiterate masses of Porto Rico and of the inadequacy of the funds that are at the disposal of the insular government for this purpose, I recommend that Congress make an appropriation to be directly expended by Federal agencies for this purpose.

All the hopes of Porto Rico for improvement in political, social, and economic conditions rest upon the general education of her people. There is such an enormous population compared to the area and wealth of the island and there is such an accumulation of illiteracy and ignorance, due to neglect of this duty in years long past, that it seems impossible for the insular government to accomplish without outside aid this immense task within a reasonable time.

Very respectfully, your obedient servant,

ARTHUR YAGER,  
*Governor of Porto Rico.*

The SECRETARY OF WAR,  
*Washington, D. C.*

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## APPENDIXES.

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## APPENDIX I.

### EXHIBITS TO THE REPORT OF THE GOVERNOR.

#### EXHIBIT A.

##### LEGISLATION.

LIST OF ACTS AND RESOLUTIONS PASSED BY THE LEGISLATURE OF PORTO RICO, NINTH ASSEMBLY, FIRST SESSION, AUGUST 13 TO NOVEMBER 26, 1917, AND APPROVED BY THE GOVERNOR.

An act to amend section 330 of the Political Code of Porto Rico, and for other purposes, approved September 25, 1917.

An act for the payment of a certain sum of money to Pedro Homar, and for other purposes, approved October 23, 1917.

An act to repeal an act entitled "An act to authorize the treasurer of Porto Rico to invest an amount not exceeding \$200,000 in first mortgage bonds of the corporation to which may be awarded the concession for the construction of the tourist hotel mentioned in sections 3, 4, 5, and 6 of an act approved September 3, 1910," approved March 7, 1912, act No. 43, approved November 2, 1917.

An act to authorize school boards to pay the salaries of special teachers in schools of a technical character, approved November 3, 1917.

An act authorizing the treasurer of Porto Rico to cancel tax receipts issued in the fiscal year 1916-17 in the name of the Succession de Bárbara Fernández, widow of Látimer, and for other purposes, approved November 5, 1917.

An act to provide textbooks for certain students in the high schools of Porto Rico, approved November 9, 1917.

An act to amend section 74 of the Political Code, approved November 9, 1917.

An act to determine rules of legal constructions applicable in cases of discrepancies between the Spanish and English texts of any law, approved November 12, 1917.

An act to protect and extend school lunch rooms to all public schools, approved November 12, 1917.

An act creating a municipal board of agriculture in each municipality of Porto Rico, approved November 12, 1917.

An act to determine the procedure in cases of claims for wages by farm laborers against their employers, approved November 14, 1917.

An act to amend sections 1 and 2 of act No. 43, approved March 13, 1913, providing proceedings for the recovery of the possession of real property, approved November 14, 1917.

An act to amend sections 1487, 1488, 1489 and 1490 of the Revised Civil Code of Porto Rico, approved November 14, 1917.

An act to amend section 1 of an act entitled "An act to regulate appeals from judgments of municipal courts in civil cases," approved March 11, 1908, approved November 14, 1917.

An act to determine the powers of the executive council of Porto Rico, approved November 17, 1917.

An act to amend section 339 of the Code of Civil Procedure as amended by act of March 12, 1908, approved November 19, 1917.

An act to authorize the municipality of Juncos to expend the 25 per cent surplus remaining from the fiscal year 1916-17 for repairs on the municipal hospital of said town, and for other purposes, approved November 19, 1917.

An act appropriating the sum of \$4,800 for the purchase of machinery, etc., for the Reform School at Mayaguez, and for other purposes, approved November 19, 1917.

An act authorizing the municipality of Arecibo to expend the 25 per cent surplus remaining from the fiscal year 1916-17, in the construction of a market place, approved November 19, 1917.

An act authorizing and directing the insular board of health to draft a sanitation code for Porto Rico and to submit the same to the legislature for its approval, approved November 19, 1917.

An act to regulate the Carnegie Library of Porto Rico, and for other purposes, approved November 22, 1917.

An act to amend section 2 of an act entitled "An act to constitute Guaynabo into a separate municipality," approved March 7, 1912, approved November 22, 1917.

An act to provide a forest service in Porto Rico, approved November 22, 1917.

An act to authorize a further issue of bonds in the sum of \$200,000 for the purpose of extending the benefits and improving and enlarging the works and structures of the irrigation system constructed and already in operation, in accordance with the provisions of the public irrigation law, and acts amendatory thereto, and for other purposes, approved November 22, 1917.

An act to guarantee the origin of Porto Rican coffee, approved November 23, 1917.

An act to regulate the granting of life certificates to the teachers of Porto Rico, and for other purposes, approved November 23, 1917.

An act to amend section 553 of the Penal Code, repeal section 554 of said code, and for other purposes, approved November 23, 1917.

An act to provide for the substitution, at the option of a party, of the bill of exceptions and statement of the case for a transcript of the evidence, prepared by the stenographer, presented to the secretary, and approved by the judge with notice to the parties, and for other purposes, approved, November 27, 1917.

An act to authorize the issuing of bonds for the purpose of constructing houses for artisans and laborers, provide for the leasing of the same within a certain right to the ownership thereof; improve the sanitary conditions of certain lands of The People of Porto Rico; promote the creation of farms to be leased to farm laborers and to grant them title thereto, and for other purposes, approved November 27, 1917.

An act organizing in the department of agriculture and labor services for the development of agriculture and industries in Porto Rico, approved November 27, 1917.

An act to amend an act entitled "An act to amend Chapter II, Title IX of the Political Code of Porto Rico and to repeal certain sections of the Penal Code, and for other purposes," approved March 13, 1913, approved July 26, 1913, approved April 13, 1916, and for other purposes, approved November 30, 1917.

An act to regulate the collection of fees for public documents executed before a notary public, and for other purposes, approved November 30, 1917.

An act to amend sections 19, 22, and 27 of an act entitled "An act assigning salaries to the registrars of property, and for other purposes," approved March 10, 1904, approved November 30, 1917.

An act to amend "An act to regulate and improve the civil service of Porto Rico," approved March 14, 1907, approved November 30, 1917.

An act to reimburse Pedro Martínez for damages suffered by him from a fire caused by sparks from a steam roller belonging to the insular government; to determine the amount of the indemnity, and for other purposes, approved November 30, 1917.

An act authorizing the commissioner of the interior to receive private donations for the survey and construction of a section of road at the place known as "Garrapata," between Manatí and Arecibo on road No. 2, and for other purposes, approved November 30, 1917.

An act temporarily to abolish the death penalty in Porto Rico; to amend sections 202 and 219 of the Penal Code and section 327 of the Code of Criminal Procedure and to repeal sections 331 to 334, both inclusive, of the latter named code; to provide for the keeping of special statistics, and for other purposes, approved November 30, 1917.

An act to amend section 16 of the Political Code, approved November 30, 1917.

An act appropriating the sum of \$5,000 for the education of deaf and dumb children, approved November 30, 1917.

An act making deficiency appropriation for temporary employees of the house of representatives and of the translation bureau; contingent expenses, legislative printing and traveling expenses during the fiscal year ending June 30, 1918, and for other purposes, approved November 30, 1917.

An act providing for the installation of safety stairways in houses having more than one story constructed of lumber and occupied by more than five families, and for other purposes, approved November 30, 1917.

An act to provide for a dispensary and minor surgeon in sugar factories, factories, workshops, electric and hydraulic plants, and for other purposes, approved November 30, 1917.

An act to protect laborers in their right to be members of labor organizations, approved November 30, 1917.

An act to establish, develop, and maintain a public park in the municipality of San Juan, to be known as "Mufioz Rivera Park," approved November 30, 1917.

An act to add a section after section 71 of "an act relating to special legal proceedings," approved March 9, 1906, and which shall be known as section 71a, and shall provide procedure for approval of partition including adjudication of property in payment of debts when minors or incapacitated persons are interested in the inheritance, approved November 30, 1917.

An act authorizing the formation of association of two or more municipalities for the purpose of issuing bonds for the survey, project, and construction of roads and other works, redeemable through a surcharge of the tax on the value of the real property of the municipalities interested: granting to such associations the character of public corporations, and regulating their organization and operation, and for other purposes, approved November 30, 1917.

An act to amend an act entitled "An act to provide for the construction of scaffolds, the protection of the public, and for other purposes," approved March 13, 1913, approved December 1, 1917.

An act to declare July 17, the birthday of Luis Mufioz Rivera, a legal holiday, approved December 1, 1917.

An act providing the manner in which certain sentences rendered by the municipal court of Vieques shall be served, and for other purposes, approved December 1, 1917.

An act directing the commissioner of the interior to maintain the section of insular roads running through the urban zones of the towns, approved December 1, 1917.

An act to amend an act entitled "An act to protect Porto Rican cigars from fraudulent misrepresentation, by providing for adequate expert inspection, and the issue of stamps of guarantee covering the origin of tobacco used in the manufacture of such cigars, intended for exportation, and for other purposes," approved March 11, 1915, approved December 3, 1917.

An act authorizing the municipality of Fajardo to expend 25 per cent of the surplus funds remaining on June 30, 1917, approved December 3, 1917.

An act authorizing municipalities to regulate the sale of fresh meats, approved December 3, 1917.

An act to amend sections 8 and 20 of the Game Law, approved April 13, 1916, approved December 3, 1917.

An act to amend section 343, Chapter I, Title IX of the Political Code, as amended by acts of March 10, 1904, and March 14, 1907, and for other purposes, approved December 3, 1917.

An act to amend articles 238, 240 and 242 of the Mortgage Law, and article 223 of the regulations for the execution thereof, approved December 3, 1917.

An act granting to former owners of property sold after July 1, 1901, for nonpayment of taxes, or to any person interested therein, the right to redeem such property under certain conditions, approved December 3, 1917.

An act to declare as an insular road the road which starting at the Ponce Playa leads to Ponce Pier, approved December 3, 1917.

An act to establish a general agency in New York for the products of Porto Rico, and for other purposes, approved December 4, 1917.

An act to provide additional revenues for The People of Porto Rico, through the levying of certain additional income taxes, and for other purposes, approved December 4, 1917.

An act establishing a legislative library and providing for the maintenance and regulation thereof, approved December 4, 1917.

An act to complete the Luquillo schools: appropriating the necessary funds, and for other purposes, approved December 5, 1917.

An act to create a "Pension fund" for the teachers of Porto Rico, and for other purposes, approved December 5, 1917.

An act authorizing the commissioner of the interior to survey and expropriate a certain section of land for the construction of a road beginning at the San Antonio Bridge, municipality of San Juan, and ending at the Martin Peña Bridge, which land lies between the railroad and the military road, and for other purposes, approved December 5, 1917.

An act to provide for the construction of school buildings in the towns of Naranjito, Villalba, Barceloneta, and Ceiba, approved December 5, 1917.

An act fixing the school year and salaries of school-teachers, approved December 5, 1917.

An act providing for the enlargement and repair of the Pedro N. Ortiz school building in the municipality of Comerio, for account of the insular treasury, and for other purposes, approved December 5, 1917.

An act providing for the construction of a graded-school building in the city of Isabela, and for other purposes, approved December 5, 1917.



An act appropriating funds for the construction of a school building in the town of San Sebastian, and for other purposes, approved December 5, 1917.

An act to provide additional revenue and to authorize and regulate the importation, manufacture, and sale of intoxicating drinks and drugs for medicinal, sacramental, industrial, and scientific purposes, and to amend sections 12 and 23 of Chapter II of an act entitled "An act to amend Chapter II, Title IX, of the Political Code and to repeal certain sections of the Penal Code, and for other purposes," approved March 9, 1906, and to repeal Act No. 48, approved April 13, 1916, and for other purposes, approved December 5, 1917.

An act defining public service companies; and providing for their regulation; prescribing, defining, regulating, and limiting their rights, powers, and duties; prescribing and defining the powers and duties of the public service commission and its officers; prescribing and regulating the practice and procedure before such commission and upon appeal, and for other purposes, approved December 6, 1917.

An act to reorganize the sanitation service of Porto Rico; to amend "an act making appropriations for the necessary expenses of carrying on the government of Porto Rico for the fiscal year ending June 30, 1918, and for other purposes," approved April 12, 1917, inasmuch as relates to the department of health, and for other purposes, approved December 6, 1917.

An act for an additional budget for payment to employees of the insular government rendering services to the senate of Porto Rico outside of office hours during the fiscal year ending June 30, 1918, and for other purposes, approved December 6, 1917.

An act to include the island of Culebra among the organized municipalities of Porto Rico, and for other purposes, approved December 6, 1917.

An act to regulate the public-charity medical service; to fix minimum salaries therein, and for other purposes, approved December 6, 1917.

An act to declare an insular road a section of road of the municipality of Jayuya; to appropriate the necessary funds for the macadamizing thereof, and other works that may be necessary, and for other purposes, approved December 6, 1917.

An act appropriating the sum of \$20,000 for the completion of the Lajas-Guanica road, in accordance with the survey made by the department of the interior, and for other purposes, approved December 6, 1917.

An act to provide for the construction of one concrete bridge over the Caguaitas River on road No. 5 from Caguas to Aguas Buenas, approved December 6, 1917.

An act appropriating the sum of \$15,000 for the construction of a reinforced concrete submersible bridge over the Grande de Loiza River on the road between Caguas and Las Piedras, near the town of San Lorenzo, approved December 6, 1917.

An act for the repair of the pier situate at the Port of Mulas in the island of Vieques, approved December 6, 1917.

An act placing under the department of the interior the Yaurel River defensive works, in the Municipality of Arroyo, and for other purposes, approved December 6, 1917.

An act appropriating the sum of \$6,000 for the construction of a municipal hospital in Comerio, and for other purposes, approved December 6, 1917.

An act for the survey and construction of an artesian well in the island of Vieques; making the necessary appropriation therefor, and for other purposes, approved December 6, 1917.

An act appropriating the sum of \$4,000 for the completion of the school building in the town of Barros, and for other purposes, approved December 5, 1917.

An act providing that road No. 1, from the town of Toa Baja to insular road No. 2, joining the latter between kilometers 18 and 19, be included in the general plan of roads of Porto Rico, and for other purposes, approved December 6, 1917.

An act appropriating the sum of \$3,000 for the reconstruction of the Culebra Pier, and for other purposes, approved December 7, 1917.

An act providing that the road from Fajardo to the port thereof, from the place known as "rambla," be recorded in the department of the interior as an insular road, approved December 7, 1917.

An act to provide for the construction of two municipal hospitals, one each in the towns of Rio Grande and Aguadilla; appropriating the sum of \$10,000, and for other purposes, approved December 7, 1917.

An act providing for the construction of a municipal hospital in the municipality of Vega Baja; appropriating the necessary funds therefor, and for other purposes, approved December 7, 1917.

An act making appropriations for the necessary expenses of carrying on the Government of Porto Rico for the fiscal year ending June 30, 1919, and for other purposes, approved December 7, 1917.

## JOINT RESOLUTIONS.

Joint resolution prescribing the number, duties, and compensation of the officers and employees of the house of representatives of Porto Rico, authorizing a transfer of funds, and for other purposes, approved September 26, 1917.

Joint resolution prescribing the number, duties and compensation of the officers and employees of the senate, approved September 26, 1917.

Joint resolution authorizing the transfer to the senate appropriation for incidentals for the fiscal year 1917-18 of the balance in the appropriation for salaries of the extinguished executive council for the fiscal year 1917-18, and for other purposes, approved October 5, 1917.

Joint resolution authorizing municipal corporations of Porto Rico to contract indebtedness, borrow money, and issue bonds for the exclusive purpose of executing works tending to supply water, construct and repair roads, and other conveniences to facilitate and aid the Federal Government of the United States in the establishment and maintenance of military camps, approved October 31, 1917.

Joint resolution making a deficiency appropriation to cover a deficit in the appropriation "Expenses of election in Porto Rico, no fiscal year," approved November 2, 1917.

Joint resolution directing the commissioner of education to allot additional teachers to certain municipalities, appropriating funds to pay their salaries, and for other purposes, approved November 2, 1917.

Joint resolution providing for the assignment of the charity schools of Santurce to the department of health, approved November 9, 1917.

Joint resolution authorizing the commissioner of the interior and the attorney general to make a settlement in the name of The People of Porto Rico with Juan Fernández Gómez and Cristóbal Fernández Díaz, and for other purposes, approved November 13, 1917.

Joint resolution to create a joint commission to compile the insular laws, approved November 17, 1917.

Joint resolution concerning aid requested by Matilde Millín to finish her studies in Porto Rico, approved November 22, 1917.

Joint resolution directing the commissioner of the interior to begin the construction of the road from Guayanabo to La Muda, approved November 22, 1917.

Joint resolution appropriating the sum of \$600,000, payable in annual installments of \$50,000, on the 1st day of July of each year subsequent to the termination of the work of dredging the harbor of San Juan and reclaiming the mangrove swamps adjacent thereto, for the purpose of reimbursing the Government of the United States in said amount as part payment of the expenditures to be made by the United States in said work, and for other purposes, approved November 22, 1917.

Joint resolution authorizing municipalities to amend their budgets in force on the basis of 100 per cent of the full assessed valuation of all property, in accordance with act No. 24, approved April 12, 1917, amending section 83 of the Municipal Law, approved November 23, 1917.

Joint resolution to include in the classified civil service of Porto Rico such principal, graded and rural teachers of public instruction as shall have taught in the public schools of Porto Rico for three or more years subsequent to 1899, approved November 23, 1917.

Joint resolution to include in the classified civil service of Porto Rico the employees of the board of commissioners of agriculture and of the insular experiment station at Rio Piedras, approved November 27, 1917.

Joint resolution authorizing the municipality of Manatí to sell at public auction a building belonging to said municipality, and to use the proceeds of said sale, together with the surplus remaining in closed appropriations, for the construction of a public market; and to contract an indebtedness of \$3,000 to be also used in the construction of the said market, approved November 28, 1917.

Joint resolution to grant a gratuity to Gerardo Quiñónes and his wife, Francisca Ortiz, on account of the death of their son, Clotilde Quiñónes y Ortiz, and for other purposes, approved November 30, 1917.

Joint resolution to organize the services of the insular experiment station of Porto Rico, approved November 30, 1917.

Joint resolution to settle a suit which The People of Porto Rico has instituted in the district court of Ponce against Juan Aquilino González relative to a rural property, and directing the commissioner of the interior, and the attorney general to make said settlement, approved November 30, 1917.

Joint resolution to reimburse the school board of Ponce for satisfaction of a judgment, approved November 30, 1917.

Joint resolution making necessary provision to settle land claims in the barrio of Cataño, Municipality of Bayamón, approved, December 3, 1917.

Joint resolution to appropriate the necessary additional funds for the reconstruction of the building belonging to The People of Porto Rico used for customhouse purposes at Fajardo, approved December 4, 1917.

Joint resolution to authorize the municipality of Caguas to expand in the fiscal year 1917-18 the 75 per cent surplus of the liquidation of regular funds in the fiscal year 1916-17, approved December 4, 1917.

Joint resolution appropriating the sum of \$4,000 to contribute toward the construction of a municipal hospital in the town of Carolina, and for other purposes, approved December 6, 1917.

Joint resolution appropriating the sum of \$4,000 or such part thereof as may be necessary for the construction of a submersible bridge over the Trigo ford of the Río Piedras River, and for other purposes, approved December 6, 1917.

Joint resolution appropriating the sum of \$10,000, or such part thereof as may be necessary, for the construction of a submersible bridge over the ford of the Grande de Loíza River at the entrance to the town of Trujillo Alto, and for other purposes, approved December 7, 1917.

Joint resolution providing for the construction of a hospital in Toa Alta; appropriating the necessary funds, and for other purposes, approved December 7, 1917.

**LIST OF ACTS AND RESOLUTIONS PASSED BY THE LEGISLATURE OF PORTO RICO NINTH ASSEMBLY, SPECIAL SESSION, FEBRUARY 6 TO 16, 1918.**

An act appropriating the sum of \$5,000 for the printing and binding of the laws of Porto Rico in the fiscal years, 1917-18 and 1918-19, approved February 18, 1918.

An act authorizing the temporary increase of the insular police force during the existence of the war, and making appropriation therefor, approved February 18, 1918.

An act to amend section 3 of "An act to amend section 553 of the Penal Code, repeal section 554 of the said code, and for other purposes," approved November 23, 1917, approved February 18, 1918.

An act to authorize the commissioner of education to issue temporary licenses to certain persons, approved February 19, 1918.

An act making deficiency appropriations for temporary employees for the house of representatives, employees of the insular government working extra hours, legislative printing, and per diem and traveling expenses of representatives during the special session of the ninth assembly, and for other purposes, approved February 19, 1918.

An act to extend the time for the taking effect of act No. 14, of the legislative assembly of Porto Rico, approved April 12, 1917, approved February 21, 1918.

An act appropriating the sum of \$5,000 for making the necessary survey and estimate for a determination of the most suitable place for the construction of a bridge over the Grande River of Arecibo to connect the city of Arecibo with the insular system of roads, approved February 21, 1918.

An act appropriating the sum of \$3,000 to continue the study of the irrigation of the lands in the valley of Lajas and in the vicinity of Isabela, and for other purposes, approved February 21, 1918.

An act to make uniform the law of warehouse receipts; to authorize persons, firms or corporations engaged in the business of storing goods for profit, to issue warehouse receipts on the goods so stored; to regulate the issuance, negotiation and transfer of such receipts, and to provide punishment for violation of said regulation, and for other purposes, approved February 21, 1918.

An act to promote the welfare of the inhabitants of Porto Rico in regard to accidents causing death or injuries to workmen while engaged in their work; establishing the duty of employers, to compensate their employees or heirs, as defined in this act, for injuries or death irrespective of negligence, and to provide ways and means for the enforcement of this duty; creating an insurance fund to secure employers against such liability and providing for the management and regulation of such insurance; creating a workmen's relief commission and determining its powers and duties; establishing the liability of The People of Porto Rico with regard to their laborers for injuries or death of such laborers in works performed by administration, and for other purposes, approved February 25, 1918.

An act authorizing the executive secretary of Porto Rico to employ temporarily one additional clerk, approved February 25, 1918.

An act to amend section 1 of act 89 of the ninth regular session of the Legislature of Porto Rico, approved December 7, 1917, and for other purposes, approved February 25, 1918.

An act authorizing the municipality of Naguabo to expend a surplus existing in the municipal treasury, and amounting to \$5,078, for a hospital, and for other purposes, approved February 25, 1918.

An act to amend section 1 of act No. 89 of the ninth regular session of the Legislative Assembly of Porto Rico, approved December 7, 1917, and for other purposes, approved March 1, 1918.

An act to amend section 5, Article I, and sections 3 and 12, Article II, of an act entitled "An act to provide additional revenues and to authorize and regulate the importation, manufacture, and sale of intoxicating drinks and drugs for medicinal, sacramental, industrial, and scientific purposes, and to amend sections 12 and 23 of Chapter II of an act entitled 'An act to amend Chapter II, Title IX, of the Political Code, and to repeal certain sections of the Penal Code, and for other purposes,' approved March 9, 1905, and "to repeal act No. 48, approved April 13, 1916, and for other purposes," approved December 5, 1917; and to amend paragraph 9, section 1, of an act entitled "An act to amend an act entitled 'An act to amend Chapter II, Title IX, of the Political Code of Porto Rico, and to repeal certain sections of the Penal Code, and for other purposes,' approved March 9, 1905, and March 9, 1911," approved March 13, 1913; and to amend article 288, Chapter I, Title IX, of the Political Code, approved March 1, 1918.

An act to amend act No. 14, approved March 12, 1914, "To regulate the automobile service of The People of Porto Rico, and for other purposes," appropriating the sum of \$5,000 for the automobile of the Resident Commissioner in Washington, and for other purposes, approved March 8, 1918.

An act authorizing the municipality of Toa Alta to expend for the construction of a municipal hospital 25 per cent of its surplus on June 30, 1917, and any other existing surplus funds from the work on the slaughterhouse and meat shop now under construction, and for other purposes, approved March 11, 1918.

An act providing for the registration of births of children and suspending for one year any act in conflict herewith, approved March 11, 1918.

An act to amend paragraph (d) of section 8 of the "Act to regulate the operation of motor vehicles in Porto Rico, and for other purposes," approved April 13, 1916, approved March 11, 1918.

An act determining cases in which decisions of approval in ex parte proceedings shall immediately become final, approved March 11, 1918.

An act to amend section 1 of an act entitled "An act to provide for the appointment of jury commissioners for the district courts of Porto Rico, and for other purposes, and to repeal sections 191 and 192 of the Code of Criminal Procedure, and all other laws, orders, and decrees in conflict herewith," approved March 10, 1904, and to amend sections 194 and 197 of the aforesaid code, and for other purposes, approved March 11, 1918.

An act to amend "An act to amend an act entitled 'An act to amend Chapter II, Title IX, of the Political Code and to repeal certain sections of the Penal Code, and for other purposes,' approved March 9, 1905, and for other purposes," approved March 11, 1911, approved March 11, 1918.

An act to amend section 374 of the Code of Criminal Procedure, approved March 15, 1918.

An act to provide for the construction of a concrete school building in the town of San German, appropriating the necessary funds, and for other purposes, approved March 16, 1918.

An act to authorize the issuance of bonds of The People of Porto Rico to the amount of \$300,000, to provide funds for and to authorize the construction and equipment of a high-school building in the city of San Juan, the completion of the high school in the city of Ponce, and for other purposes, approved March 16, 1918.

#### JOINT RESOLUTIONS.

Joint resolution for the construction of 4,600 meters of road running from the town of Ceiba to the port of Ensenada Honda of said municipality; appropriating the sum of \$10,000 for said work, and for other purposes, approved February 25, 1918.

Joint resolution to amend joint resolution No. 12 of the ninth regular session of the Legislature of Porto Rico, approved November 30, 1917, and for other purposes, approved March 9, 1918.

#### CONCURRENT RESOLUTION.

Concurrent resolution praying the Congress of the United States to extend to Porto Rico the laws commonly known as the rural credits and vocational education acts.

## EXHIBIT B.

## LIST OF APPOINTMENTS BY THE GOVERNOR DURING THE FISCAL YEAR 1917-18.

## JUDICIAL APPOINTMENTS.

## Supreme Court of Porto Rico:

Salvador Mestre, fiscal, June 20, 1918.

Joaquín López Cruz, secretary reporter, June 4, 1918.

## District courts:

## Judges and fiscals—

Angel Acosta Quintero, fiscal, Mayaguez, September 7, 1917.

Santiago Vivaldi Pacheco, fiscal, Ponce, September 21, 1917.

José E. Figueras, fiscal, Aguadilla, September 27, 1917.

Jacinto Texidor, judge, San Juan, section 1, October 2, 1917.

Rafael Cuevas Zequeira, judge, Humacao, November 3, 1917.

Domingo Sepúlveda, judge, Ponce, November 20, 1917.

J. A. López Acosta, judge, Guayama, November 20, 1917.

José N. Quiñones, fiscal, Guayama, November 20, 1917.

Charles E. Foote, judge, Mayaguez, June 20, 1918.

## Secretaries—

Aguadilla, February 20, 1918.

Arecibo, November 27, 1917.

Guayama, November 27, 1917.

Humacao, November 20, 1917.

Humacao, February 19, 1918.

Mayaguez, November 27, 1917.

Ponce, November 27, 1917.

San Juan, section 1, November 27, 1917.

San Juan, section 2, November 27, 1917.

## Marshals—

Aguadilla, February 20, 1918.

Arecibo, November 27, 1917.

Guayama, February 19, 1918.

Humacao, November 27, 1917.

Ponce, February 19, 1918.

## Municipal courts:

## Judges—

Adjuntas, February 19, 1918.

Aguadilla, February 20, 1918.

Añasco, February 27, 1918.

Arecibo, February 19, 1918.

Barros, February 20, 1918.

Bayamón, February 27, 1918.

Camuy, February 19, 1918.

Carolina, February 19, 1918.

Cayey, February 20, 1918.

Ciales, February 20, 1918.

Guayama, February 19, 1918.

Humacao, February 19, 1918.

Juana Diaz, February 20, 1918.

Manati, February 20, 1918.

Mayaguez, February 19, 1918.

Patillas, October 11, 1917.

## Municipal courts—Continued.

## Judges—Continued.

Rio Grande, February 20, 1918.

Rio Piedras, February 20, 1918.

Salinas, February 20, 1918.

San German, February 20, 1918.

San Lorenzo, February 19, 1918.

San Sebastian, February 20, 1918.

Utua, February 19, 1918.

Vega Baja, February 19, 1918.

Yabucoa, February 20, 1918.

Yauco, September 21, 1917; February 19, 1918.

Municipal judge at large, February 27, 1918.

## Secretaries—

Aguadilla, February 20, 1918.

Añasco, February 27, 1918.

Arecibo, February 19, 1918.

Barros, February 20, 1918.

Bayamon, February 19, 1918.

Camuy, February 19, 1918.

Carolina, February 19, 1918.

Cayey, February 20, 1918.

Ciales, February 20, 1918.

Coamo, February 20, 1918.

Fajardo, February 20, 1918.

Guayama, February 19, 1918.

Humacao, February 19, 1918.

Juana Diaz, February 20, 1918.

Lares, February 19, 1918.

Manati, February 20, 1918.

Mayaguez, February 19, 1918.

Patillas, February 20, 1918; June 21, 1918.

Ponce, February 20, 1918.

Rio Grande, February 20, 1918.

Rio Piedras, February 20, 1918.

Salinas, February 20, 1918.

San German, February 20, 1918.

San Juan, February 19, 1918.

San Lorenzo, February 19, 1918.

Utua, February 19, 1918.

Vega Baja, February 19, 1918.

Vieques, February 19, 1918.

Yabucoa, February 20, 1918.

Yauco, February 19, 1918; April 15, 1918.

## Marshals—

Adjuntas, April 16, 1918.

Aguadilla, February 20, 1918.

Añasco, February 27, 1918.

Arecibo, February 19, 1918.

Barros, February 20, 1918.

Bayamon, February 19, 1918.

Cabo Rojo, February 20, 1918.

Caguas, October 10, 1917.

Camuy, February 19, 1918.

Carolina, February 19, 1918.

Cayey, February 20, 1918.

Ciales, February 20, 1918.

**Municipal courts—Continued.****Marshals—Continued.**

Coamo, November 20, 1917; February 20, 1918.  
 Fajardo, February 20, 1918.  
 Guayama, February 19, 1918.  
 Humacao, February 19, 1918.  
 Juana Díaz, February 20, 1918.  
 Lares, February 19, 1918.  
 Manati, February 20, 1918.  
 Patillas, February 20, 1918.  
 Río Grande, February 20, 1918.  
 Río Piedras, February 20, 1918.  
 Salinas, February 20, 1918.  
 San German, February 20, 1918.  
 San Juan, February 19, 1918.

**Municipal courts—Continued.****Marshals—Continued.**

San Lorenzo, February 19, 1918.  
 Utuado, February 19, 1918.  
 Vega Baja, February 19, 1918.  
 Vieques, February 19, 1918.  
 Yabucoa, February 20, 1918.

**Justices of the peace:**

Agua's Buenas, February 20, 1918.  
 Fajardo, July 26, 1917.  
 Guayama, February 20, 1918.  
 Juncos, April 19, 1918.  
 Maunabo, February 20, 1918.  
 Mayaguez, September 21, 1917.  
 Peñuelas, February 19, 1918.  
 Trujillo Alto, August 13, 1917.

**MUNICIPAL APPOINTMENTS—ALCALDES.**

Aibonito, April 10, 1918.  
 Arecibo, June 4, 1918.  
 Camuy, November 3, 1917.  
 Culebra, March 8, 1918.  
 Fajardo, June 24, 1918.

Humacao, May 15, 1918.  
 Loiza, August 24, 1917; May 27, 1918.  
 Río Grande, May 27, 1918.  
 Yabucoa, November 20, 1917.

**APPOINTMENTS TO FILL VACANCIES IN MUNICIPAL COUNCILS.**

Aguada, 3.  
 Aguadilla, 1.  
 Arecibo, 2.  
 Arroyo, 3.  
 Barros, 2.  
 Cabo Rojo, 1.  
 Caguas, 1.  
 Camuy, 1.  
 Carolina, 3.  
 Cayey, 1.  
 Ceiba, 1.  
 Ciales, 3.  
 Coamo, 1.  
 Comerio, 3.  
 Culebra, 5.

Fajardo, 3.  
 Guayama, 2.  
 Guaynabo, 2.  
 Gurabo, 1.  
 Hormigueros, 2.  
 Humacao, 1.  
 Jayuya, 2.  
 Juana Díaz, 1.  
 Juncos, 2.  
 Lares, 1.  
 Las Marías, 2.  
 Las Piedras, 1.  
 Loiza, 2.  
 Luquillo, 1.  
 Maricao, 1.

Mayaguez, 2.  
 Naguabo, 3.  
 Patillas, 2.  
 Ponce, 2.  
 Quebradillas, 1.  
 Sabana Grande, 1.  
 Salinas, 2.  
 San Juan, 4.  
 San Lorenzo, 2.  
 Santa Isabel, 1.  
 Toa Alta, 2.  
 Toa Baja, 1.  
 Utuado, 2.  
 Vega Alta, 1.  
 Yauco, 1.

**MISCELLANEOUS APPOINTMENTS.**

Board of dental examiners: Lorenzo R. Noa, May 20, 1918.

**Board of medical examiners:**

Dr. Francisco Matanzo, April 22, 1918.  
 Dr. Manuel Quevedo Báez, May 15, 1918.  
 Dr. Luis A. Saliva, June 15, 1918.

**Board of management, Ponce Pier:**

W. Tobias, October 20, 1917.  
 F. Manuel Toro, November 28, 1917.  
 Guillermo Schuck Suárez, November 28, 1917.  
 Ermelindo Salazar, November 28, 1917.

Board of pharmacy: José J. Alvarez, June 15, 1918.

Board of review and equalization: Pablo Vilella Pol, May 20, 1918.

**Board of trustees, Carnegie Library:**

Isabel Andréu de Aguilar, April 5, 1918.  
 Josefa Noell, April 5, 1918.  
 Luis Muñoz Morales, April 5, 1918.  
 W. G. Coxhead, April 5, 1918.

Civil service commission: Manuel Sánchez Morales, November 20, 1917.

**Commissioners of deeds:**

Adolph Michelsohn, Quebec, Canada, September 28, 1917.  
 G. B. Mountcastle, Virginia, December 8, 1917.  
 John S. Wurts, Pennsylvania, June 19, 1918.

**District chiefs of police:**

First class, 1.  
 Second class, 1.  
 Third class, 2.  
 Fourth class, 4.  
 Fifth class, 2.  
 Sixth class, 4.  
 Seventh class, 6.  
 Eighth class, 11.

Executive secretary of Porto Rico: R. Siaca Pacheco, September 4, 1917.

Food commission: Manuel Camuñas, October 1, 1917.

**Heads of departments:**

José E. Benedicto, treasurer of Porto Rico, September 4, 1917.

Manuel Camuñas, commissioner of agriculture and labor, September 4, 1917.

Alejandro Ruiz Soler, commissioner of health, September 4, 1917.

Guillermo Esteves, commissioner of the interior, February 18, 1918.

Inspector of police: D. J. Genac, March 19, 1918.

**Insular board of health:**

Dr. José S. Belaval, March 13, 1918.

Dr. J. A. López Antongiorgi, March 16, 1918.

Juan Hernández López, April 5, 1918.

Insular police commission: Francisco R. de Goenaga, November 20, 1917.

**Municipal boards of agriculture:****Adjuntas—**

José Victor Bosch.

Alfredo Palmieri.

Pedro Irizarri.

**Aguada—**

Francisco Moret.

Anastasio Ramos.

Pedro Vargas.

**Aguadilla—**

José Juan Cruz.

Elias Sotomayor.

Pedro Hernández Almeyda.

**Aguas Buenas—**

Críspulo Morales Díaz.

José Juliá Marín.

Juan María López.

**Aibonito—**

Anastasio Noriega.

Felipe Rivera Zayas.

Guadalupe Benítez.

**Añasco—**

Francisco Figueroa.

Rafael Arrillaga García.

Juan Ramón Rivera.

**Arecibo—**

Sebastián Figueroa.

Francisco Coll Toste.

José Santos Rodríguez.

Cándido Jiménez.

Juan Figueroa Reyes.

**Arroyo—**

Harry MacCormick.

Hipólito González.

Alejandro Flores.

**Barceloneta—**

Juan Ruiz.

Domingo Pérez.

Fernando Suria.

**Barranquitas—**

Horacio Berrios.

José Julián Pagan.

Nicolás Pagan.

**Barros—**

Oscar Guerrero.

Pablo Torres.

Celestino Colón.

**Municipal boards of agriculture—Contd.****Bayamón—**

Solon A. Davison.

Virgilio Dávila.

Jesús Huertas.

**Cabo Rojo.**

Victor A. Carbonell.

Luis Chigliotty.

Juan Ramírez y Pabón.

**Caguas—**

Juan Solá González.

José Ramírez Muñoz.

Antonio E. Grillo.

**Camuy—**

Nicolás Chico.

Pedro G. Amador.

Luis M. Graulau.

**Carolina—**

Francisco A. Torres.

Saturnino Wolkers.

Antonio Orlando.

**Cayey—**

Rafael Rivera.

César María Ortíz.

Juan Dumont.

**Ceiba—**

Carmelo Colón.

Antonio Rivera Quiñones.

Eduardo Arias.

**Ciales—**

Ezequiel Cortés.

José Román Bruno.

Antonio Rivera Pérez.

**Cidra—**

Juan Carrión.

Lázaro Ramos.

Jacinto Santos.

**Coamo—**

Pablo Cot.

Severo Fuente.

Celestino Caratini.

**Comerio—**

Cristino Maldonado.

Valeriano Santos.

Pablo Bernart.

**Corozal—**

Francisco Silva.

Eugenio Rivera.

Nicolás Rodríguez.

**Culebra—**

Eleuterio Feliciano.

Juan Carrera.

Juan González.

**Dorado—**

Pedro López.

Genaro Marrero.

Feliciano Méndez

**Fajardo—**

Jorge Bird Arias.

Francisco Rivera.

Trifón Torres.

**Guanica—**

Luis Quiñones.

José Claudio.

Cancio Pérez.

## Municipal boards of agriculture—Contd.

## Guayama—

Joaquín Rovira.  
Manuel Verges.  
Domingo Covas.

## Guayanilla—

Gustavo Yordán.  
Felipe Pubill.  
Mario Franceschini.

## Guaynabo—

José Zeno.  
Zenón Díaz.  
Javier Hernández.

## Gurabo—

Rafael González.  
Juan Pujadas.  
Macario Candelaria.

## Hatillo—

Luis M. Ginorio.  
Pedro Delgado Delgado.  
Juan Froilán Cruz.

## Hormigueros—

Ramón Vélez.  
Miguel Cruz García.  
Francisco Díaz.

## Humacao—

Pedro Ruiz.  
Evaristo López.  
Luis Recurt.

## Isabela—

Félix N. Banuchi.  
José E. Muñoz.  
Juan C. Monclova.

## Jayuya—

Heraclio Medina.  
Ramón Robles.  
Mariano Reyes.

## Juana Díaz—

Carlos B. Batlle.  
Juan J. Arroyo.  
Enrique Alvarado.

## Juncos—

Félix Rexach.  
Tomás Príncipe.  
Ramón Bruguera.

## Lajas—

Pedro J. Faría.  
Ramón Díaz Ojea.  
Demetrio Flores.

## Lares—

Ricardo López.  
Antonio C. González.  
Juan Bta. Sein.

## Las Marías—

Julio Vincenty,  
Sebastián Cabrera,  
Agapito Journet.

## Las Piedras—

Jesús Ma. Reyes,  
Isidoro Velázquez,  
José Hernández.

## Loiza—

Francisco Calzada,  
Simón Reyes,  
Castor Carrión.

## Luquillo—

Francisco Calderón,  
Eladio Pereira,  
Manuel Figueroa.

## Municipal boards of agriculture—Contd.

## Manatí—

Ramón Parés Reyes,  
Osvaldo Freytes,  
Ruperto Piñeiro.

## Maricao—

J. Andrés Massari,  
Ramón Ortiz,  
Joaquín González.

## Mayaguez—

Eugenio Forestier,  
Pedro Nieva,  
Pedro R. Matos,  
Agustín Pesante,  
Juan Cancio Ortiz.

## Moca—

Ramón Castro Cortés,  
Serafín Méndez Cortés,  
Gregorio Pérez.

## Naguabo—

Marcelino Borges, jr.,  
Higinio Leduc,  
Esteban Hernández.

## Naranjito—

Alfredo Archilla Ramos,  
Joaquín Rivera,  
Armando López.

## Patillas—

Nazario Bernier,  
Eugenio Torres,  
Genaro Bermúdez.

## Peñuelas—

Felipe Silén Asencio,  
Alfonso Quiñones,  
Nemesio Arroyo.

## Ponce—

Mario Mercado,  
Temístocles Díaz,  
Jorge Armstrong,  
Emilio Fagot,  
Abelardo Melero.

## Quebradillas—

Antonio Jiménez,  
José Amador Hernández,  
Ramón Saavedra Hernández.

## Rincón—

Manuel Martínez,  
Sandalio Cardona,  
Juan de Dios Caro.

## Río Grande—

José G. Calderón,  
Basilio Dávila,  
Antonio R. León.

## Río Piedras—

Francisco J. Solís,  
Octavio García Salgado,  
Juan M. Rivera.

## Sábana Grande—

Enrique Laessle Rivera,  
Joaquín García,  
José Castillo.

## Salinas—

Arturo Godreau,  
Serafín Pabón,  
Francisco Sécola.

## San Germán—

Enrique Quiñones,  
Juan N. Matos,  
Valeriano García.



## Municipal boards of agriculture—Contd.

San Juan—  
 Ramón Aboy,  
 Jesús María Rossey,  
 Francisco R. de Goenaga,  
 José A. Rexach,  
 Manuel Juliá.

San Lorenzo—  
 Esteban Parrilla Montañez,  
 Francisco Sánchez Rodríguez,  
 Rafael Aponte Sánchez.

San Sebastián—  
 Manuel Rodríguez Cabrero,  
 Wenceslao D. Sifre,  
 José D. Medina.

Santa Isabel—  
 Ventura Rodríguez,  
 Juan J. Blanco,  
 Miguel Santiago.

Toa Alta—  
 Virgilio Morales Cabrera,  
 Federico López del Valle,  
 José Nieves Guardiola.

Toa Baja—  
 Gerónimo Fonalledas,  
 Oscar Nevárez,  
 Laureano Rodríguez.

Trujillo Alto—  
 Gerardo Betancourt,  
 Miguel Díaz Rivera,  
 Carlos Asencio.

Utuado—  
 Antonio Tulla Torres,  
 Narciso Nicolau,  
 Fructuoso García Pérez.

Vega Alta—  
 José Manuel Santiago,  
 Lorenzo Cabrera,  
 Juan Pablo Dávila.

Vega Baja—  
 Arturo Guerra,  
 Andrés Guerrero,  
 Tomás Tulier.

Vieques—  
 Miguel Simons,  
 Manuel Quiñones,  
 Antonio Nieves.

## Municipal boards of agriculture—Contd.

Villalba—  
 Aldado Sánchez,  
 Vicente Zayas,  
 Natividad Guzmán.

Yabucoa—  
 José L. Berrios,  
 Felipe G. Dávila,  
 Martín Quiñones.

Yauco—  
 Arturo Lluberas,  
 Antonio Olivari Olivari,  
 Nicanor Rodríguez.

Pension board:  
 María González de Amy, March 1,  
 1918.  
 Antonio Sarriera, March 1, 1918.  
 José Otero, March 1, 1918.

Registrars of property:  
 Rafael Tirado Verrier, San Juan, sec-  
 tion 1, February 15, 1918.  
 Augusto Malaret, Mayaguez, Febru-  
 ary 27, 1918.

San Juan Harbor board: Edward Ferrer,  
 November 20, 1917.

Special fiscal at large: Jaime Sifre, jr.,  
 June 20, 1918.

Translation bureau:  
 Pedro de Castro, chief, August 24,  
 1917.  
 George W. Roberts, assistant chief,  
 August 24, 1917.  
 Herminio Padial, assistant translator  
 and interpreter, August 24, 1917.  
 José Escudero, stenographer, August  
 24, 1917.  
 Severo Marrero, messenger, August  
 24, 1917.

Workmen's relief commission:  
 José A. Canals, May 27, 1918.  
 José Reguero Feliú, May 27, 1918.  
 Abraham Peña, May 27, 1918.

## EXHIBIT C.

TABLE I.—Personnel of the insular police force of Porto Rico at the close of the fiscal year ending June 30, 1918, showing also the number of horses and bicycles in each district.

Districts.	District chiefs.	Ser-geants.	Cor-porals.	Guards-men.	Deteo-tives.	Total.	Horses.	Bicycles.
Adjuntas.....		1		2		3		
Aguada.....	1			4		5	1	1
Aguadilla.....	1		1	11	1	14	1	1
Aguaa Buenas.....		1		2		3		
Albionito.....	1			2		3		
Añasco.....	1		1	6		8	2	1
Arecibo.....	1	1	1	21		24	2	2
Arroyo.....	1			5		6	1	2
Barceloneta.....				4		4	1	2
Barranquitas.....	1			3		4		
Barros.....	1			2		3	1	

TABLE I.—*Personnel of the insular police force of Porto Rico at the close of the fiscal year ending June 30, 1918, showing also the number of horses and bicycles in each district—Continued.*

Districts.	District chiefs.	Ser-geants.	Cor-porals.	Guards-men.	Detect-ives.	Total.	Horses.	Bicycles.
Bayamon.....	2	1	2	22		27	4	2
Cabo Rojo.....	1			4		5	1	1
Caguas.....	1		1	10		12	1	2
Camuy.....	1			2		3		
Carolina.....	1			5		6	1	1
Cayey.....	1		1	6		8	3	2
Cebalga.....			1	3		4		1
Ciales.....				3		3		
Cidra.....		1		2		3		
Coamo.....	1			3		4	1	1
Comerio.....	1			3		4	2	
Corozal.....	1			2		3	1	
Dorado.....	1			3		4	1	1
Fajardo.....	1	1		9		11	2	1
Guanica.....	1		1	10		12		1
Guayama.....	1	1	2	17		21	4	1
Guayanilla.....	1			3		4	2	
Guaynabo.....				3		3		1
Gurabo.....	1			2		3	1	
Hatillo.....	1			2		3	1	
Headquarters.....			1	14		15		
Hormigueros.....	1			3		4		
Humacao.....	1		1	7		9	3	2
Isabela.....	1			3		4	1	1
Jayuya.....	1			1		2		
Juana Diaz.....	1	1		7		8	4	2
Juncos.....			1	5		6		1
Lajas.....	1			2		3	1	1
Lares.....	1			3		4		
Las Marias.....				3		3		
Las Piedras.....			1	3		4		
Loiza.....	1			6		7	1	1
Loquillo.....	1			2		3		1
Manati.....	1		1	10		12	2	2
Maricao.....	1			2		3	1	
Mamabo.....	1			3		4		1
Mayaguez.....	1	1	2	32	1	37	4	5
Moca.....	1			2		3		
Morovis.....	1			3		4		
Naguabo.....	1			5		6	3	1
Naranjito.....				2		2		
Patillas.....	1			4		5	3	1
Peñuelas.....	1			2		3	2	1
Ponce.....	1	2	1	39	4	47	2	3
Questradillas.....	1			2		3		1
Rincon.....	1			4		5		
Rio Grande.....	1			5		6		1
Rio Piedras.....	1		1	8		10	1	2
Sabana Grande.....	1			3		4	1	1
Salinas.....	1		1	5		7	1	4
San German.....	1			5		6	1	1
San Juan.....	5	2	10	159	17	193	6	2
San Lorenzo.....				3		3	1	
San Sebastian.....	1			2		3		
Santa Isabel.....	1			5		6	1	2
Toa Alta.....	1			2		3		
Toa Baja.....	1			4		5	1	1
Trujillo Alto.....		1		1		2		
Ututo.....	1			6		7		
Vega Alta.....	1			3		4	1	
Vega Baja.....	1			6		7	1	1
Vieques.....	1		1	7		9	2	
Yabucoa.....	1			4		5	2	
Yanco.....	1		1	4		6	2	2
Total.....	66	14	33	577	23	713	82	65

NOTE.—Chief of insular police, the adjutant and the chief of detectives, detached at police headquarters San Juan. Inspector, vacant.

TABLE II.—*Number of felonies committed by both sexes during the fiscal year ending June 30, 1918.*

Crimes.	Acquitted.		Sentenced.		Pending.		Total.
	Men.	Women.	Men.	Women.	Men.	Women.	
Arson.....			2		3		5
Attempt to murder.....	6		20	2	14		42
Burglary.....	19		177	8	38		242
Cattle stealing.....	2		52				54
Counterfeiting of coins.....			1				1
Conspiracy.....	2		12		1		14
Crime against public health and security.....	9		49		1		59
Crime against nature.....			4		1		5
Falsification.....					2		2
Grand larceny.....	6		40	1	9	1	57
Homicide.....	12		11	1	5		29
Incest.....			2		4	1	7
Mayhem.....	1		2				3
Murder.....	5		12	2	8		27
Rape.....	1		7		9		17
Robbery.....	4		3		8		15
Seduction.....	1		39				40
Violation postal laws.....			3				3
Total.....	68		436	14	102	2	622

*Recapitulation.*

Cases tried, males.....	504
Cases tried, females.....	14
Cases pending.....	104
Grand total.....	622

TABLE III.—*Number of arrests made, convictions and acquittals, during the fiscal year ending June 30, 1918, for the following offenses and crimes.*

Crimes.	Acquitted.		Sentenced.		Total.	
	Men.	Women.	Men.	Women.	Men.	Women.
Abuse of confidence.....	20		191	6	211	6
Adultery.....	2	2	4	4	6	6
Advertisement law, violation of.....			1			
Animals, cruelty to.....	278	1	1,844	18	2,122	19
Arson.....			2		2	
Article 300, Penal Code, violation of.....	15	1	87	4	102	5
Article 353, Penal Code, violation of.....			2		2	
Article 370, Penal Code, violation of.....	4		12		16	
Assault and battery.....	254	18	1,239	69	1,493	87
Attempt to murder.....	6		21	2	27	2
Automobile law, infraction of.....	306	1	1,030	19	1,336	20
Bigamy.....			1		1	
Birds' law, violation of.....	1		6		7	
Burglary.....	19		177	8	196	8
Cattle stealing.....	2		52		54	
Coins, counterfeit of.....			1		1	
Conspiracy.....	2		12		14	
Court, contempt to.....			14		14	
Documents, falsification of.....			2		2	
Embezzlement public funds.....			1		1	
Electoral law, violation of.....	2		3		5	
Excise tax, infraction of.....	1		18		19	
Executive power, crime committed by or against the.....	2		5		7	
Exposures, indecent.....	14	7	36	10	50	17
False pretense.....	20	1	190	1	210	2
Food commission rules, violation.....	33	4	174	9	207	13
Gambling.....	1,263	31	10,384	83	11,647	114
Game law, violation of.....	5		8		13	
Health and safety, crime against the public.....	9		49		58	
Homicides.....	12		11	1	23	1
Incest.....			2		2	
Injury, malicious.....	42	2	107	3	149	5
Insanity, dangerous.....	3	1	26	9	29	10
Internal-revenue law, violation of.....	3		5		8	

TABLE III.—Number of arrests made, convictions and acquittals, during the fiscal year ending June 30, 1918, for the following offenses and crimes—Continued.

Crimes.	Acquitted.		Sentenced.		Total.	
	Men.	Women.	Men.	Women.	Men.	Women.
Justice, crime against public.....	12	1	40	2	52	3
Juvenile law, violation of.....	1	1	8	1	9	2
Larceny, grand.....	6		40	1	46	1
Larceny, petit.....	309	20	2,107	65	2,416	85
Larceny (Sec. 444, A. F. C.).....	2		30		32	
Labor law, violation of.....	19		17		36	
Libel.....	1		1		2	
Lottery tickets, sale of.....			15		16	
Medicine, illegal practice of.....	7		21		30	
Military service conscription law, violation of.....	12		73		85	
Minors, neglect of.....	1		6	1	7	1
Minors, working of.....	3		9	1	12	1
Minors, corruption of.....	1		12	3	13	3
Murders.....	5		12	2	17	2
Mayhem.....	1		2		3	
Mature, crime against.....			4		4	
Ordinances, violation of municipal.....	563	197	4,678	865	5,241	1,062
Organic law, violation of.....	3		19		22	
Other crimes.....	75	7	135	8	210	15
Peace, disturbance of.....	831	223	4,046	928	4,877	1,115
Peace, security to keep the.....			1		1	
Persons requisitioned.....					120	2
Pharmacy law, violation of.....			2		2	
Postal law, violation of.....			3		3	
Prisoners, recaptured, escaped.....					82	
Prostitution.....	1	15	21	12	22	27
Rape.....	1		7		8	
Road laws, violation of.....	47		937	6	984	6
Robbery.....	4		3		7	
Sanitary law, violation of.....	190	13	1,866	164	2,056	177
Sedition.....	1		39		40	
School law, violation of.....			4		4	
Slander.....	2	2	14	1	16	3
Section 553, Penal Code.....	101	3	376	8	480	11
Warrants of arrests.....					2,536	105
Weapons, carrying deadly.....	82		1,833	9	1,915	9
Weights and measures, violation of law.....	108	1	584	9	692	10
Total.....	4,710	552	32,680	2,333	40,137	2,992

## Recapitulation.

Men arrested.....	40,137
Women arrested.....	2,992
Cases pending.....	827
Grand total.....	43,956

During the year there were 140 suicides and 102 attempts at suicide.

TABLE IV.—*Number of fires which took place in Porto Rico during the fiscal year ending June 30, 1918, number of deaths caused thereby, number of and description of property destroyed or damaged, insurance carried, and the approximate amount of loss.*

District.	Death.	Property.	Insurance.	Approximate loss.
Aguadilla.		1 house and store.	\$7,000.00	\$9,000.00
Do.		Machinery.	4,500.00	500.00
Barranquitas.		1 house.		250.00
Bayamon.		1 carpenter shop and tools.		800.00
Cabo Rojo.		1 house.		100.00
Caguas.		1 sugar factory.		5,000.00
Do.		1 hut.		75.00
Do.		2 tobacco sheds and hut.		( <sup>1</sup> )
Carolina.		1 hut.		60.00
Cayey.		1 tobacco shed, 1 stable, and 1 horse.		1,000.00
Do.		1 house.		100.00
Ciales.		do.	2,000.00	( <sup>1</sup> )
Cidras.		1 tobacco shed.		100.00
Do.		1 tobacco shed and 1 hut.		600.00
Corozal.		1 hut.		80.00
Dorado.		1 house.		250.00
Gurabo.		1 hut.		15.00
Do.		1 cigar factory, 8,406 hundredweights tobacco, and utensils.	322,000.00	408,000.00
Guaynabo.		2 huts.		60.00
Hatillo.		1 sugar factory.	( <sup>1</sup> )	15,000.00
Isabela.		2 houses.		450.00
Do.	2	1 hut.		12.00
Jayuya.		do.		40.00
Juana Diaz.		2 houses and 3 shops.	7,500.00	5,500.00
Lajas.		1 shed and 100 hundredweights of corn.		965.00
Las Piedras.		1 hut.		20.00
Lola.		1 cottage.		75.00
Do.		1 hut.		( <sup>1</sup> )
Luquillo.		do.		50.80
Do.		do.		20.00
Manati.		do.		45.00
Mayaguez.		1 distillery, 37,000 liters alcohol.	24,000.00	45,000.00
Do.		1 warehouse and provisions.	101,500.00	100,000.00
Do.		8 houses.		2,800.00
Naranjito.		1 hut.		60.00
Naguabo.		do.		25.00
Penuelas.		do.		50.00
Ponce.		do.		60.00
Do.		do.		50.00
Do.		4 houses.		850.00
Do.		1 house.	1,500.00	2,200.00
Do.		1 store.	( <sup>1</sup> )	200.00
Do.		1 house.	3,000.00	400.00
Quebradillas.		1 hut.		60.00
Do.		7 huts.		354.00
Do.	1	1 hut.		( <sup>1</sup> )
San Juan.		3 houses.	2,500.00	7,800.00
Do.		1 store.	1,500.00	500.00
Do.		1 drug store.	6,000.00	( <sup>1</sup> )
Do.		1 store.	600.00	300.00
Do.		1 hut.		60.00
Do.		1 store.	2,000.00	1,500.00
San Sebastian.		1 house and furniture.		660.00
Salinas.		1 hut and sewing shop.		600.00
Toa Baja.		1 hut.		25.00
Do.		1 house.		100.00
Vega Alta.		11 houses.	4,000.00	25,000.00
Vega Baja.		1 house.		500.00
Do.		1 railroad wagon and cargo.		( <sup>1</sup> )
Total.	3		489,800.00	640,801.00

<sup>1</sup> Amount not given.

## EXHIBIT D.

LIST OF FRANCHISE ORDINANCES PASSED BY THE EXECUTIVE COUNCIL OR PUBLIC SERVICE COMMISSION AND APPROVED BY THE GOVERNOR OF PORTO RICO.

BY THE EXECUTIVE COUNCIL.

An ordinance granting a revocable permit to The Fajardo Sugar Growers' Association to take and use for irrigation purposes 60 liters of water per second from the Quebrada Palmas River, in the municipality of Naguabo. Approved July 9, 1917.

An ordinance granting a revocable permit to The Fajardo Sugar Growers' Association to take and use for irrigation purposes 122.4 liters of water per second from the Mameyes River, municipality of Luquillo. Approved July 31, 1917.

An ordinance amending "An ordinance granting a revocable permit to The Fajardo Sugar Growers' Association to take and use for irrigation purposes five hundred and nineteen liters of water per second from the Fajardo River, in the municipality of Fajardo." Approved July 31, 1917.

An ordinance amending "An ordinance granting to The Fajardo Sugar Company, its successors and assigns, the right to take two hundred and twenty-five gallons of water per second from the Fajardo River for industrial purposes." Approved July 31, 1917.

An ordinance granting to the municipality of Utuado authority to use water from the Vivi River for generating electric energy, and to maintain, operate, and extend an electric plant in Utuado. Approved August 11, 1917.

An ordinance granting to the municipality of Patillas authority to construct, maintain, and operate an electric distributing system in Patillas. Approved August 11, 1917.

An ordinance granting to the municipality of Arroyo authority to take water from the Patillas Canal of the irrigation system for municipal water supply. Approved August 11, 1917.

An ordinance granting a revocable permit to Sucesion de J. Serralles, to construct and maintain a concrete dam in Guayo River. Approved August 13, 1917.

An ordinance amending "An ordinance granting to Arturo Guerero authority to use the water of the Morovis River for generating electric energy, and to construct, maintain, and operate an electric plant in Morovia." Approved August 13, 1917.

An ordinance granting to Garcia & Molinelli authority to construct, maintain, and operate an electric plant in Guanica. Approved August 28, 1917.

An ordinance granting to Alejandro Franceschi authority to use the water of the Guayanilla River for generating electric energy, and to construct, maintain, and operate an electric plant in Guayanilla. Approved August 29, 1917.

An ordinance authorizing the Compania de Fuerza Hidro-Electrica de Ponce to construct, maintain, and operate a hydroelectric plant, and to use for that purpose the total flow of water of the Inabon River. Approved August 29, 1917.

An ordinance amending "An ordinance granting to Gabino Balasquide authority to take water from the Barreal and Guayanes Rivers, or from the Tallaboa River, for generating electrical energy, and to construct, maintain, and operate an electric power plant and distributing system in Penuelas, and a distributing system in Guayanilla." Approved August 29, 1917.

An ordinance supplementing and amending "An ordinance granting to the Compania de los Ferrocarriles de Puerto Rico, and to its successors, and assigns, the right to extend its railway lines to and between certain points in the island of Porto Rico." Approved August 29, 1917.

BY THE PUBLIC SERVICE COMMISSION.

An ordinance granting to the Compania de los Ferrocarriles de Puerto Rico the right to construct and temporarily operate a spur or branch from a point on its main line between San Juan and Rio Piedras to the site of the cantonment of the National Army at Seboruco. Approved March 15, 1918.

An ordinance granting to the municipality of Arroyo authority to construct, maintain, and operate an electric distributing system in Arroyo. Approved March 20, 1918.

An ordinance amending section 3 of an ordinance entitled "An ordinance amending an ordinance entitled 'An ordinance granting to Thomas D. Mott, jr., authority to construct, maintain, and operate a system for the manufacture, distribution, and sale of gas.'" Approved May 14, 1918.

An ordinance amending subsection 3 of section 3 of an ordinance entitled "An ordinance amending an ordinance entitled 'An ordinance granting to J. Alex Mayers authority to construct, maintain, and operate a system for the manufacture, distribution, and sale of gas in Ponce.'" Approved May 16, 1918.

An ordinance granting to the Aibonito Electric Co. authority to use the water of the Usabon River, for generating electric energy, and to construct, maintain, and operate an electric plant and distributing system in Aibonito. Approved May 17, 1918.

## EXHIBIT E.

## STATISTICAL DATA CONCERNING CIVIL SERVICE OPERATIONS DURING THE FISCAL YEAR 1917-18.

TABLE A.—Results of examination.

Examination.	Number of applicants.	Applications canceled.	Failed to report.	Pending.	Number examined.	Passed.	Failed.	Percent passed.	Appointments.
Assessor and internal revenue agent <sup>1</sup> .....	35		9		26	16	10	61.53	12
Chainman <sup>1</sup> .....	5		1		4	1	3	25.00	3
Chauffeur.....	12	2			10	10		100.00	8
Chemist, experiment station <sup>1</sup> .....	4	2			2	2		100.00	2
Chemist, assistant <sup>1</sup> .....	3	1	2						
Chief clerk and chief of bureau <sup>1</sup> .....	5	2			3	2	1	66.66	1
Civil engineer, assistant <sup>1</sup> .....	4	1			3	2	1	66.66	4
Clerk, first grade <sup>1</sup> .....	94		13		81	51	30	62.96	16
Clerk, first grade <sup>1,2</sup> .....	13				13	9	4	69.23	
Clerk, second grade <sup>1</sup> .....	305	7	31		267	79	188	29.58	28
Clerk, second grade <sup>1,2</sup> .....	5				5	4	1	80.00	
Clerk, third grade <sup>1</sup> .....	142	2	10		130	83	47	63.84	20
Clerk, third grade <sup>1,2</sup> .....	1				1	1		100.00	
Clerk, registry of property <sup>1</sup> .....	4				4	2	2	50.00	2
Clerk, storekeeper (reform school) <sup>1</sup> .....	1				1	1		100.00	1
Compositor.....	8				8	8		100.00	
Director insular experiment station <sup>1</sup> .....	1				1	1		100.00	1
Draftsman, apprentice architectural <sup>1</sup> .....	2				2	1	1	50.00	1
Draftsman, jr., architectural <sup>1,2</sup> .....	4				4	2	2	50.00	2
Draftsman, jr., topographical <sup>1,2</sup> .....	1		1		1	1		100.00	
Draftsman, jr., topographical <sup>1</sup> .....	3				3	3		100.00	2
Draftsman, topographical <sup>1</sup> .....	2				2	2		100.00	2
Draftsman, topographical <sup>1</sup> .....	1				1	1		100.00	
Engine driver (gasoline roller) <sup>1</sup> .....	1				1	1		100.00	1
Engine driver (steam roller) <sup>1</sup> .....	3				3	2	1	66.00	1
Examiner of accounts <sup>1</sup> .....	7				7	4	3	57.66	3
Inspector of agriculture, assistant <sup>1</sup> .....	23	12			11	11		100.00	
Inspector, building construction <sup>1</sup> .....	5	1	3		1	1		100.00	1
Inspector, public works <sup>1</sup> .....	6	3			3	1	2	33.33	
Inspector, weights and measures <sup>1,2</sup> .....	1				1	1		100.00	1
Internal revenue agent, tobacco expert <sup>1</sup> .....	5				5	2	3	40.00	2
Janitor.....	11				11	11		100.00	7
Laboratory assistant <sup>1</sup> .....	2				2	2		100.00	2
Leveler <sup>1</sup> .....	6	1			5		5		2
Lineman.....	2	1			1		1		4
Master carpenter.....	5	1	1		4	3	1	75.00	1
Master mason.....	3		1		2	2		100.00	
Matron.....	1				1	1		100.00	3
Nurse.....	14	1		1	13	13		100.00	9
Overseer, assistant <sup>1</sup> .....	6		1		5		5		3
Overseer <sup>1</sup> .....	4				4	1	3	25.00	1
Police capataz <sup>1</sup> .....	12		3		9	2	7	22.22	3
Practicante.....	8	1			7	7		100.00	
Prison guard <sup>1</sup> .....	24	5	5		14	10	4	71.42	20
Printing pressman.....	2				2	2		100.00	
Road foreman <sup>1</sup> .....	12		3		9	2	7	22.22	5
Rodman <sup>1</sup> .....	7				7	5	2	71.42	8
Sanitary inspector <sup>1</sup> .....	97	5	12		80	18	62	22.50	14
Stenographer <sup>1</sup> .....	97		2	3	95	26	69	27.36	15
Surveyor <sup>1</sup> .....	2				2	2		100.00	2
Telegrapher <sup>1</sup> .....	87	3	5	2	79	33	46	41.77	15
Telephone operator.....	14				14	14		100.00	2
Transitman <sup>1</sup> .....	5				5	3	2	60.00	4
Typewriter <sup>1</sup> .....	81	9	8	1	73	36	37	49.31	18
Typewriter <sup>1,2</sup> .....	1				1	1		100.00	
Visiting physician.....	1				1	1		100.00	1
Total.....	1,210	59	110	7	1,050	500	550	47.62	257

<sup>1</sup> Written examination.<sup>2</sup> Noncompetitive examination for promotion.

TABLE A-1.—*Examinations held for the United States Civil Service.*

## FOR ORIGINAL APPOINTMENT IN PORTO RICO.

Examination.	Number exam- ined.	Passed.	Failed.	Per cent passed.
<i>Educational.</i>				
Stenographer and typewriter (field service).....	5	5	.....	100.00
First-grade English (Customs Service).....	39	16	23	41.02
Post Office—Clerk carrier (Spanish).....	79	62	17	78.48
Post Office—Clerk carrier (English).....	41	33	8	80.48
Subclerical (English).....	1	1	.....	100.00
Subclerical (Spanish).....	25	21	4	84.00
Total.....	190	138	52	72.63

FOR ORIGINAL APPOINTMENT TO POSITIONS IN THE UNITED STATES.<sup>1</sup>

	Compet- itors.		Compet- itors.
Clerk, bookkeeper.....	1	Scientific assistant.....	1
Clerk, departmental.....	27	Stenographer and typewriter.....	17
Clerk, editorial.....	1	Teacher, Philippine service.....	1
Clerk with knowledge of stenography and type- writing.....	5	Total.....	62
Clerk, railway mail.....	1	Total examined:	
Commercial agent.....	1	For original appointment in Porto Rico... 190	
Commissioner, deputy shipping.....	1	For original appointment to positions in the United States.....	62
Examiner, patent office.....	1	In all.....	252
Immigrant inspector (noncompetitive).....	1		
Immigrant inspector.....	1		
Operator, calculating machine.....	1		
Operator, multigraph.....	2		

<sup>1</sup> The results of these examinations are not communicated to this commission.



TABLE B.—Changes in the Porto Rican civil service during the fiscal year ending June 30, 1918.

Character of change.	Governor.		Police.		Secretary.		Justice.		Finance.		Auditor.		Interior.		Education.		Agriculture and labor.		Civil service.		Health.		Univ-ersity.		Insular Library.		Totals.		
	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	U.	C.	
Probational and original ap- pointments.....	2	184			14	123	51	4	26		8	71	71	514	2	1	7		1	150	52	19		6	1,066	240	1,306		
Reinstatements.....																												35	517
Transfers.....	2		2		1	1	4		7		4	6	12	471	2	1					3	11				432	51	94	
Promotions.....	3	83			32	28	146	3	113	2	42	6	153	158	11	1	3		2	1	123	100	3			406	610	1,016	
Reductions.....														30													34	49	83
Separations.....					23	48	62	3	37		1	6	59	89	617	8					132	132	21		3	1,060	288	1,357	
Appointments.....			6		14	18	76		4			14	49	299	3		22		9				4		4	74	519	593	
Separations.....					1	14	28		4			44	102		1		5		2		29					59	175	234	
	3	5	456	8	89	235	373	7	232	3	78	235	646	1,837	25	2	55		15	408	428	47		13	3,233	1,967	5,200		

C—Classified. U—Unclassified.

TABLE C.—Distribution of positions in the Porto Rican civil service, by department; salary, nationality, and classification.

Salary of position (dollars).	Governor.		Police.		Executive secretary.		Justice.		Finance.		Auditor.		Interior.		Irrigation.	
	Non-N.	P.	Non-N.	P.	Non-N.	P.	Non-N.	P.	Non-N.	P.	Non-N.	P.	Non-N.	P.	Non-N.	P.
10,000.....																
9,500.....	1															
9,000.....																
8,500.....																
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750.....																
500.....																
250.....																
100.....																
75.....																
50.....																
25.....																
10.....																
5.....																
2.....																
1.....																



TABLE C.—*Distribution of positions in the Porto Rican civil service, by department, salary, nationality, and classification—Continued.*

Salary of position (dollars).	Governor.			Police.			Executive secretary.			Justice.			Finance.			Auditor.			Interior.			Irrigation.		
	Non-N.			Non-N.			Non-N.			Non-N.			Non-N.			Non-N.			Non-N.			Non-N.		
	C.	U.	P.	C.	U.	P.	C.	U.	P.	C.	U.	P.	C.	U.	P.	C.	U.	P.	C.	U.	P.	C.	U.	P.
360.....										4														
300.....										1														
250.....													4											
240.....																								
230.....																								
223.....																								
222.....																								
210.....																								
204.....																								
200.....																								
180.....																								
180.....																								
156.....																								
150.....																								
144.....																								
136.....																								
120.....																								
96.....																								
84.....																								
72.....																								
Total.....	2	2	1	1	9	716	3	49	2	4	8	251	192	13	184	3	5	3	42	6	374	74	6	61

TABLE C.—Distribution of positions in the Porto Rican civil service, by department, salary, nationality, and classification—Continued.

Salary of position (dollars).	Education.			Agriculture and labor.			Health.			Civil service commission.			Senate.		House of representatives.		University.		Library.		San Juan Harbor board.		Institute of Tropical Medicine.		Public service commission.		Totals.	
	Non-N.			Non-N.			Non-N.			Non-N.			P.		P.		Non-N.		Non-N.		Non-N.		Non-N.		Non-N.		Non-N.	
	C. U. C.			C. U. C.			C. U. C.			C. U. C.			C.		C.		C.		C.		C.		C.		C.		C.	
	C.	U.	C.	C.	U.	C.	C.	U.	C.	C.	U.	C.	U.	C.	U.	C.	C.	U.	C.	C.	C.	U.	C.	C.	C.	C.	C.	U.
10,000.....																												
6,500.....																												
5,500.....																												
5,000.....																												
4,500.....																												
4,000.....																												
3,900.....																												
3,750.....																												
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1,700.....																												
1,620.....																												
1,600.....																												
1,550.....																												
1,500.....																												

Non-N.—Non-native.

P.—Native.

C.—Classified service.

U.—Unclassified service.

TABLE C.—Distribution of positions in the Porto Rican civil service, by department, salary, nationality, and classification—Continued.

[illegible]

400	1,700	1	6	1	1,700	1	6	1	1,700
390	3	6	10	1	6	40	18	36	6
380		4	33	2	2	18	9	36	1
370			20					34	1
360	1		17					17	3
350			13					26	7
340			26					9	1
330			13					18	16
320			16					9	4
310			1					60	11
300			3					11	1
290			11					1	1
280									
270									
260									
250									
240									
230									
220									
210									
200									
190									
180									
170									
160									
150									
140									
130									
120									
110									
100									
90									
80									
70									
Total.....	7	97	20	2,812	2	52	3	2	2
			209	167	1	4	2	29	48
						43	50	1	10
								2	2
								8	
								5	42
								164	1,271
									4,170

TABLE D.—*Distribution of positions and salaries in classified and unclassified service, based on appropriations, fiscal year 1918-19.*

Branch of the service.	Classified service.			Unclassified service.			Total.		
	Total salaries.	Number of positions.	Average salary.	Total salaries.	Number of positions.	Average salary.	Total salaries.	Number of positions.	Average salary.
Senate.....				\$25,950	29	\$895	\$25,950	29	\$895
House of representatives.....				36,830	48	767	36,830	48	767
Governor.....	\$920	2	\$460	14,300	3	4,767	15,220	5	3,044
Police.....	8,260	9	918	426,380	717	595	434,640	726	612
Executive secretary.....	63,920	52	1,229	7,000	2	3,500	70,920	54	1,313
Justice.....	177,870	255	698	293,420	200	1,467	471,290	455	1,033
Department of finance.....	200,220	197	1,016	10,000	3	3,333	210,220	200	1,051
Auditor.....	67,300	47	1,432	9,600	3	3,200	76,900	50	1,538
Interior department.....	323,560	380	851	13,038	74	176	336,598	454	741
Interior irrigation service.....				62,640	67	935	62,640	67	935
Education.....	33,620	27	1,245	1,469,440	2,909	505	1,503,060	2,936	511
University.....				108,180	93	1,163	108,180	93	1,163
Carnegie Library.....	8,280	11	753				8,280	11	753
Agriculture and labor.....	67,120	54	1,243	9,700	3	3,233	76,820	57	1,348
Civil service commission.....	3,280	4	820	3,300	3	1,100	6,580	7	940
Department of health.....	229,740	271	848	44,968	167	271	274,708	438	274
San Juan Harbor board.....				8,400	4	2,100	8,400	4	2,100
Institute of tropical medicine.....									
Public service commission.....	8,820	5	1,764	9,760	8	1,220	18,580	13	1,420
Total.....	1,192,910	1,314	907	2,552,904	4,333	594	3,745,814	5,647	663

TABLE E.—*Number of positions and total salaries of native and nonnative officers and employees.*

Branch of the service.	Natives.			Nonnatives.		
	Total salaries.	Number employed.	Average salary.	Total salaries.	Number employed.	Average salary.
Senate.....	\$25,950	29	\$895			
House of representatives.....	36,830	48	767			
Governor.....	3,220	3	1,073	\$12,000	2	\$6,000
Police.....	431,040	725	594	3,600	1	3,600
Executive secretary.....	65,620	51	1,287	5,300	3	1,767
Justice.....	435,640	443	983	35,650	12	2,971
Department of finance.....	192,420	187	1,029	17,800	13	1,369
Auditor.....	57,100	42	1,360	19,800	8	2,475
Interior department.....	322,098	448	719	14,500	6	2,417
Interior irrigation service.....	48,940	61	802	13,700	6	2,283
Education.....	1,402,210	2,832	492	100,850	104	770
University.....	40,980	50	820	67,200	43	1,563
Carnegie Library.....	7,380	10	738	900	1	900
Agriculture and labor.....	72,420	55	1,317	4,400	2	2,200
Civil service commission.....	3,880	6	647	2,700	1	2,700
Department of health.....	271,586	436	623	3,120	2	1,560
San Juan Harbor board.....	3,600	2	1,800	4,800	2	2,400
Institute of tropical medicine.....	9,760	8	1,220			
Public service commission.....	8,820	5	1,764			
Total.....	3,439,494	5,441	632	306,320	206	1,487

## APPENDIX II.

### REPORT OF THE EXECUTIVE SECRETARY OF PORTO RICO.

OFFICE OF THE EXECUTIVE SECRETARY,  
*San Juan, P. R., September 16, 1918.*

SIR: I have the honor to submit, as provided by law, the annual report of this office for the fiscal year 1917-18.

#### LEGISLATION.

The first regular session of the Ninth Legislature of Porto Rico was convened, in accordance with the provisions of the new organic act, on the twenty-eighth day after the first election provided for therein, that is, on August 13, 1917, said session having been adjourned on November 26 of the same year. During said session the legislature passed 160 bills and resolutions, which are now on file in this office in compliance with the law. Of these bills and resolutions, 116 were approved by the governor, 1 was not signed and became a law without the approval of the governor, as it was not returned to the legislature within the legal term; 32 were vetoed and returned to the legislature by the governor, and the remaining 11 were not signed by the governor and did not become laws, because their return to the legislature was prevented by the adjournment of said body before the expiration of the term in which they should have been returned.

On February 4, 1918, the governor issued a proclamation calling a special session of the legislature to consider several matters of importance for the public interests which required some legislative action. In pursuance of this call, the legislature convened on February 6 and adjourned on February 16, 1918, and during said special session 36 bills were passed, of which 27 were approved by the governor and 9 were allowed to fail for lack of his approval and signature.

#### PUBLICATIONS.

Two volumes of laws were published and distributed during the fiscal year. One was a volume of more than 800 pages containing both in English and Spanish all the legislation passed by the Ninth Legislature of Porto Rico in its first regular session of 1917, as well as some legislation passed by the Congress of the United States in the years 1916 and 1917, which was by its express terms totally or partially applicable to Porto Rico. It was considered advisable to translate such congressional legislation into Spanish and to give publicity to it here for two reasons: (1) Because most of them were war measures, such as the food-control act, the trading-with-the-enemy act, and the act regulating the manufacture, distribution, etc., of explosives, and should be thoroughly known by the people of this island so that the same cooperation they are earnestly and loyally giving in every other war activity tending to the support of the Nation in this emergency may be secured from them in the enforcement of said measures; (2) because it is always advisable to furnish the people whenever it may be possible with the most ample information as to the laws that they are obliged to obey and comply with, so as to avoid the transgression of the same and the troubles and penalties that the people may suffer due to ignorance for lack of publication of said laws.

The other volume was a small one of about 150 pages, containing only the acts and resolutions approved during the special session held by the legislature in February of this year.

Sixteen administrative bulletins containing proclamations by the governor and sanitary rules and regulations were also published and distributed.

The sale of volumes of the compilation and of the session laws during the fiscal year amounted to \$1,293.47.

Before closing this part of my report, I wish to renew the strong recommendation I made last year for the prompt publication of a new register of Porto Rico, as soon as the government may spare the necessary money to make a new edition. A considerable number of requests for copies of said book are being constantly received from outside people who desire to secure all kinds of information about Porto Rico, many of them to gain therefrom a knowledge of the business possibilities offered by this island. Also the pupils of our schools found in the register an accurate source of information as to the principal facts connected with the history of the country



and the official and private activities thereof, and as the last edition of the register, which was published in 1911, is now exhausted, they surely would receive with pleasure the publication of a new issue of the book which has been so valuable to them in past years.

#### GOVERNOR'S APPOINTMENTS.

From July 1, 1917 to June 30, 1918, 521 commissions for judicial, municipal, and executive officers were signed by the governor and forwarded by this office as follows:

Judicial officers.....	124
Municipal officers.....	322
Insular executive officers.....	75
<b>Total.....</b>	<b>521</b>

Two hundred and thirty members of the municipal boards of agriculture created by Act No. 9 $\frac{1}{2}$  of November 12, 1917, are among the municipal officers above mentioned. Of the total number of 521 appointments, 72 were recess appointments.

#### PASSPORTS.

During the last year the work done in this office in connection with the issuance of passports has been four times greater than in 1916-17. From July 1, 1917, to June 30, 1918, 1,637 applications for passports were submitted to this office, of which 1,825 were granted, 6 were refused, and 2 were given up by the applicants.

The following comparative statement shows more clearly such increase of work:

Fiscal year.	Passports issued.
1902-3.....	38
1906-10.....	141
1912-13.....	151
1913-14.....	239
1914-15.....	197
1915-16.....	283
1916-17.....	381
1917-18.....	1,625

The increase in the last fiscal year was principally due to the fact that under a joint order issued by the United States Departments of State and Commerce no steamship could take any passenger on board from American territory unless he or she had a passport, or some other official document with photographs affixed thereto, to prove his or her nationality and indentity.

It was absolutely impossible for the personnel usually devoted in this office to said work to handle the increased amount of correspondence connected therewith, as well as to examine the applications and to issue the passports. The work was getting unavoidably behind, and it was necessary in order to render an efficient service and prevent unreasonable delay to ask the legislature for an additional clerk, whose employment was authorized by Act No. 11 of February 25, 1918. The appointment of the new employee, however, has not afforded complete relief, and the passport division of this office is still obliged to do extra work every day out of office hours to prevent a new accumulation of correspondence.

The following statement shows the number of passports issued for every foreign country:

Santo Domingo.....	1,028
Cuba.....	229
Panama.....	190
Venezuela.....	67
Spain.....	25
Cuba in transit to the United States.....	25
Haiti.....	20
Canada.....	8
Curacao, Danish West Indies.....	7
Brazil.....	6
Mexico.....	3
West Indies.....	3
Argentine Republic.....	2
Guadeloupe, French West Indies.....	2
Peru.....	2
British West Indies.....	2
France.....	1
Colombia.....	1
Martinique, French West Indies.....	1
Central America.....	1
Cuba en route to Navassa Island.....	1
Nicaragua.....	1
<b>Total.....</b>	<b>1,625</b>

It is clearly seen that the emigration to the neighboring island of Santo Domingo is increasing constantly and as fast as the great natural resources of said island are being developed in this period of internal peace, brought about by the American intervention, which is no doubt going to be a source of immense benefit for the future life and independence of the Dominican people. The number of passports issued for Santo Domingo alone is 63 per cent, while the number issued for all the other countries is only 37 per cent, but it is to be understood that that number does not represent exactly the number of persons who have gone to Santo Domingo in the last fiscal year, as many who were not of military age went there without a passport before the issuance of the joint order mentioned elsewhere in this report.

In examining and deciding an application for passport, four things are of paramount importance. The first is that the applicant be indisputably a citizen of the United States; the second is that he is loyally and earnestly supporting the Government in this great national emergency; the third is that the true object of this trip abroad and the imperative necessity of said trip be clearly established, it being the policy of the Department of State to issue passports only to persons going abroad on urgent business, and not to those intending to travel to foreign countries for pleasure or study; and the fourth is that should the applicant be within the military age, he must have a permit to get a passport from the authorities in charge of the draft. Residents in the United States who may be temporarily in Porto Rico can not secure a passport to go to a foreign country without authorization from the State Department, which authorization is always requested by cable.

All or each of these things require sometimes special investigation, and in order that the applicant should not miss his steamer or suffer any damage on account of not receiving his passport as soon as he might desire, notices have been published in the local press explaining the necessity of making the application for passports 10 days or two weeks in advance of the date of the sailing of the ship. Notwithstanding these notices, many people are applying for their passports at the last moment, thus causing considerable and unnecessary trouble to this office, and in most cases losing the ship they were anxious to take.

There have been many divers questions in reference to passports that have arisen in the course of the year and which have produced some temporary difficulties and have required consideration by this office and inquiry from the Department of State in order to settle them promptly and in the best possible manner. Among the most important are the following:

The Governor of the Virgin Islands of the United States, in order to keep a proper check upon civilians traveling to said islands, gave instructions to steamship agents and masters of vessels to the effect that, from and after March 1, 1918, no civilian would be allowed to land in the Virgin Islands unless provided with a passport by the Government of the territory or country from which his journey was started. Several inquiries were made to this office from persons who desired to go to the Virgin Islands as to whether they would be able to secure a passport to comply with the above-mentioned instructions, and in every case they were informed that no passport could be issued to them by the Governor of Porto Rico, as under the rules and regulations governing the issuance of passports this class of documents only could be granted for going to foreign countries and not to another American territory, and the Virgin Islands had already been transferred by the Kingdom of Denmark to the United States.

The question was complicated by the fact that many natives of the Virgin Islands who had been for a long time permanently residing in Porto Rico were also trying to secure passports as American citizens to go to their native country to visit their relatives, and their citizenship was not positively established.

At the same time many persons who were going to New York came to the secretary's office asking for passports, stating that without those documents they could not land in continental United States, and basing their informal petitions on the fact that the Department of State was granting passports from the United States for Porto Rico. However, as no instructions had been given to us for the issuance of passports for travel from an American territory to another, these petitions were also denied.

Conditions in this respect were rather chaotic, and required a great deal of correspondence by cable and by mail to have the entanglement straightened out. At last, advices were received that proper instructions had been issued for use of identification cards, instead of passports, between the United States, Porto Rico, and the Virgin Islands, said cards to be granted by the immigration officer at the port of embarkation.

In regard to the political status of the natives of the Virgin Islands, after the ratification of the convention between the United States and Denmark the Department of State held that pending action by the Congress of the United States definitely estab-

lishing the citizenship status of the persons affected by the convention they should be described in passports issued to them as "inhabitants of the Virgin Islands, entitled to the protection of the United States." It was also held that as the convention refers to "Danish citizens residing in said Islands, \* \* \* who remain in the islands," it would not appear to affect Danish subjects who had ceased to reside in the islands prior to their cession to the United States.

The question as to whether a person had ceased to reside in said islands is, however, to be decided in accordance with the particular circumstances and facts of each case.

Another question that we took up during the year with the authorities at Washington was the following: Some Porto Ricans residing at Cuba and Santo Domingo come to this island on business or to visit relatives for a short stay, provided with emergency passports issued by the respective American legations. There was nothing in the rules and regulations authorizing the visé of these emergency passports so as to make them valid for the return trip to Santo Domingo or Cuba, and on the other hand it was considered that if such persons were obliged to take a new passport from the government of Porto Rico after going through all the requirements, troubles, and expenses incident thereto, an unnecessary hardship would be imposed upon them, for which there was no apparent reason. The matter was submitted by cable to the State Department, through usual channels, and it was decided that said emergency passports could be used for the return trip after duly viséed by the Governor of Porto Rico. Of course, in doubtful cases, it will be necessary to make a complete investigation before allowing the holder of one of those documents to leave the island, and if he is subject to military service, the passport is not to be viséed until a permit to leave the country issued by the district board in charge of the draft is presented.

The government of Porto Rico is collecting a fee of \$1, which is paid in internal-revenue stamps, for the issuance of each passport, under the provisions of section 59, paragraph 6, of the Political Code of Porto Rico, approved March 1, 1902. This charge is made to compensate, at least in a very small part, the amount annually spent by the insular government in the clerical force, stationery, postage, etc., necessary to handle the correspondence connected with the issuance of passports. In the last fiscal year, \$1,625 were therefore collected, but against that sum the estimated annual expenditures are as follows: Salaries of two regular and one additional clerks, per annum, \$3,700; stationery, \$85; postage, \$100; cable and telegraph expenses, \$150; total, \$4,035.

#### MUNICIPAL ORDINANCES.

Sixty ordinances of municipalities and school boards for the purpose of borrowing money, or selling, leasing, or otherwise disposing of municipal real property, or compromising some judicial proceedings in which a municipality was a party, were submitted to the governor's approval during the fiscal year. After careful examination thereof in this office, 48 were approved, 2 were disapproved, and no action was necessary on the remaining 10.

#### FRANCHISES.

Nineteen franchise ordinances were passed by the Executive Council or the public-service commission during the fiscal year. All of them were duly examined and filed in this office after their approval by the governor. Certified copies thereof were transmitted to the United States Congress as provided by law and also forwarded to the Bureau of Insular Affairs, War Department, and to all the executive departments of the insular government. The Executive Council, which was in existence since the organization of the civil government created by the Foraker Act, ceased on August 12, 1917; that is, immediately before the date on which the new legislature provided for by the new organic act of Porto Rico was assembled and organized. The powers that the Executive Council had in connection with the grant of franchises, privileges, and concessions of a public or quasi-public nature are now vested in a public-service commission, which met for the first time and was provisionally organized on October 4, 1917, and is composed of the heads of the six executive departments, the auditor, and two elective members.

## PARDONS.

In the fiscal year 1917-18, 316 petitions for clemency were received in this office, which were acted upon by the governor in the following manner:

Granted:	
Absolute pardons.....	6
Conditional pardons.....	50
Paroles.....	21
Commutation of sentences.....	2
Remission of costs.....	1
Political rights restored.....	8
	88
Denied.....	157
Filed without any consideration.....	51
Cases in which terms of sentence expired during investigation and consideration.....	3
Pending on June 30, 1918.....	17
Total.....	316

## COMMISSIONERS OF DEEDS.

During the fiscal year two commissions were prepared by this office and signed by the governor for commissioners of deeds. One was to reappoint a commissioner for the State of Virginia and the other to appoint a commissioner for the Province of Quebec, Dominion of Canada, where no officer of this kind had before been appointed.

A list of all the commissioners of deeds for Porto Rico whose terms of office have not yet expired is attached hereto. They are 11 in all, 5 for the State of New York and 1 each for the States of Tennessee, Maryland, Virginia, and Pennsylvania, the District of Columbia, and the Province of Quebec in the Dominion of Canada.

## CORPORATIONS.

Thirty-two new corporations were organized in accordance with the laws of Porto Rico during the last fiscal year, 12 more than in 1916-17, with an authorized capital stock in total of \$17,874,500 and a capital paid in of \$116,600.

Said 32 corporations were organized for the following purposes: Mercantile, 7; agricultural, 6, among which 3 were for sugar growing and manufacturing; transportation, 4, one of which was a railroad company; printing, 3; manufacturing, 2; construction, 2; laundry, 2; banking, 1; moving-pictures exchange, 1; electric plant, 1; warehousing, 1; drugs business, 1; and amusements, 1.

The number of domestic corporations existing and doing business on June 30, 1918, were 195, with a paid-in capital of \$22,784,200.23.

The following statement shows the organization of corporations, year by year, since the enactment in 1902 of a corporation law under the American system:

Fiscal year.	Number of corporations organized.	Authorized capital stock.	Paid-in capital stock.
1902-3.....	9	\$1,260,000.00	\$219,863.07
1903-4.....	5	335,000.00	40,500.00
1904-5.....	10	1,340,000.00	135,000.00
1905-6.....	12	1,007,500.00	247,200.00
1906-7.....	24	3,273,000.00	725,450.00
1907-8.....	27	3,665,500.00	269,155.00
1908-9.....	14	1,825,000.00	504,650.00
1909-10.....	32	5,608,000.00	1,317,250.00
1910-11.....	27	7,566,000.00	2,006,810.00
1911-12.....	40	6,903,000.00	1,450,018.00
1912-13.....	28	2,379,000.00	243,045.00
1913-14.....	18	1,202,000.00	45,300.00
1914-15.....	14	1,275,000.00	18,300.00
1915-16.....	16	1,336,000.00	187,900.00
1916-17.....	20	3,185,000.00	231,250.00
1917-18.....	32	17,874,500.00	116,600.00

Only seven foreign corporations were registered in this office in the last fiscal year, with a total authorized capital stock of \$27,773,000 and a total paid-in capital of \$27,498,000. The businesses carried out by them are as follows: Banking, 1; insurance, 1; construction, 2; mining, 1; purchase and shipping of sugar, 1; and fruit growing, 1.

Seven domestic corporations were voluntarily dissolved and 16 foreign corporations ceased to do business in Porto Rico during the fiscal year. Of said 16 foreign corporations, 6 were German insurance companies which had been operating in Porto Rico for a long term of years and were obliged to discontinue their business for the duration of the war, in obedience to the Executive order issued by the President of the United States on July 13, 1917.

More information about this matter may be found in the tabulated statements hereto attached.

#### ASSOCIATIONS NOT FOR PECUNIARY PROFIT.

Incorporated and registered in this office under the laws of Porto Rico in 1917-18.....	12
Dissolved in the same period.....	6
Organized outside of Porto Rico, which ceased to do business in the same fiscal year.....	1

Of the 12 nonpecuniary associations incorporated, 3 were religious, 2 professional, 2 to promote agriculture, 2 fraternal, 2 beneficial, and 1 charitable.

Lists relative to all the associations above referred to, as well as lists of all non-pecuniary associations, both domestic and foreign, doing business in Porto Rico on June 30, 1918, are attached hereto.

#### UNITED STATES PATENTS AND TRADE-MARKS.

Forty-six United States letters patent and 23 United States trade-marks were registered in this office, in accordance with the provisions of sections 58 and 59 of the Political Code. Said registration was secured through the filing of certified copies of registrations made by the Commissioner of Patents, Washington, D. C.

In the matter of registration of patents, Porto Rico has no jurisdiction, as it is a Federal service. In regard to trade-marks, Porto Rico has its own law, and the owners of United States trade-marks generally have also registered them as domestic trade-marks, so as to obtain full protection under the local law, because the scope of the protection afforded to them by the United States registration for use in interstate commerce or in commerce with foreign nations is not known. This question is one of judicial determination and only a court of competent jurisdiction may pass upon it.

#### DOMESTIC TRADE-MARKS.

Sixty-two domestic trade-marks were registered in 1917-18 and three were denied registration, as they so nearly resembled the lawful trade-mark of another person as to be likely to deceive purchasers, with loss and damage to the owner of the similar trade-mark already in use.

The 62 trade-marks registered were applicable to the sale of the following articles:

Petroleum products.....	1
Electrical apparatus.....	1
Cement for construction.....	1
Paper and stationery.....	2
Musical instruments and supplies.....	1
Motor vehicles and parts thereof.....	6
Fertilizer.....	1
Refrigerating units.....	1
Nonalcoholic beverages.....	5
Fancy goods.....	1
Foods and ingredients of foods.....	14
Paints and painters' materials.....	2
Horological instruments and parts thereof.....	1
Heating apparatus.....	1
Coffee.....	10
Clothing.....	3
Medicines.....	1
Photographic apparatus and parts thereof.....	4
Construction materials.....	2
Hardware.....	1
Publications.....	1
Machines.....	1
Alcoholic beverages.....	1
Total.....	62

#### OLD SPANISH ARCHIVES.

The classification and indexing of the documents of these archives is slowly progressing, on account of lack of personnel. Only two employees are devoted to such work, and they very often have to be used for the prompt dispatch of other matters claiming immediate attention and which can not be taken up by any other employee,

due to the congestion of work always existing in this office since the entrance of the United States into the war. During the fiscal year, a total number of 4,479 expedientes were examined, and 11 files were formed with 709 classified expedientes, the balance of 3,770 expedientes having been set apart as without importance and useless for any purpose. The total number of the new files now reaches 335, with 26,969 expedientes.

Two new rooms on the lower floor of the executive mansion were secured by the undersigned for the purpose of placing there, in better conditions of ventilation and cleaning, the files containing the classified expedientes, and after said rooms were duly prepared and painted, those files were transferred to them and placed in proper shelves. But the remaining 8,000 unclassified files still are in the awful condition described in my last annual report.

Three hundred and ninety-two certified copies of the declarations made by Spaniards born in the Spanish Peninsula to preserve their allegiance to the Crown of Spain were issued by this office in 1917-18, and the search for the original documents and the information given in other cases, verbally or by mail, to persons interested in said declarations, took a great part of the time of the archivist and his assistant. These certified copies were requested for the purpose of presenting them to the local boards in charge of the execution of the selective-service law, in support of claims of exemption from military service, generally made by the sons of the declarants, on the ground of foreign nationality.

The moths and the comejen are continuing rapidly their destructive work on the papers of the old régime. Notwithstanding the historical value of many of them, and the urgent appeals made by this office for a number of years to have said papers kept in a more suitable place than the one heretofore used for such a purpose, nothing has been done in that direction, and the complete loss of most of these valuable records will promptly be an accomplished fact, if some steps are not taken to avoid it without any delay.

Year by year this office has requested:

(1) That these old records be removed to another government building where they may be kept and preserved in good condition; (2) that they be placed under the custody of the board of trustees of the Carnegie Library, where they properly belong; and (3) that a sufficient appropriation be made for such removal, keeping, and preservation, and for bringing to an end in the shortest time possible, the work of classification and indexing of the documents so that they may be available for future use.

From time to time statements have been given to the press as to important historical events mentioned in some of the documents examined, with a view of awakening public opinion and create some demand on the part of the people for a better preservation of these original sources of their history, but I have painfully to confess that this effort has not found the general support I was looking for.

I again strongly recommend that the above-mentioned measures be adopted so as to avoid the just criticism of the future historians of this island who will be prevented from using this excellent material when they try to reconstruct the events that happened in Porto Rico during the last centuries of the Spanish domination.

#### HUNTING LICENSES.

Section 8 of the game law of April 13, 1916, was amended in the first session of the ninth legislature, in order to fix the closed season for hunting wild pigeons of all kinds, turtle doves and partridges, from November 1 to June 1. In the original law, the hunting of such birds was prohibited from the 1st of January until the 15th of July, but it is the belief of the game experts that the new closed season is more in accordance than the old one with the times in which the young of said class of birds are reproduced and bred.

As this office was expecting, due to its efforts and the earnest cooperation of the department of justice and the insular police force, the number of hunting licenses issued during 1917-18 was 115, or 65 per cent more than in 1916-17. So the number of unlicensed hunters, if any still exist, is reduced to the minimum, and at the same time a careful watch is maintained by the police to avoid transgressions of the provisions of law relative to the closed seasons.

After the war was declared, and in view of the fact that a license for hunting gives to the bearer thereof the right to carry all kinds of shotguns and other arms the use of which may be adapted to hunting, this office has taken all necessary precautions in the issuance of such licenses so as not to grant the privilege of carrying arms to unreliable persons or persons whose loyalty to the Nation was not absolutely free from doubt.

The fee to be paid for a hunting license is \$10 in internal-revenue stamps.

## CONSULAR OFFICERS.

Seven new foreign consular officers in Porto Rico were duly recognized by the State Department in the last fiscal year, and entered in the register kept for the purpose in this office. Among them there was a position newly created, that of honorary vice consul of Peru at Mayaguez. The Government of Peru only had had here a consul at San Juan with jurisdiction over the whole island.

Twenty-five nations have at present a consular representation appointed for this island. They are the Argentine Republic, Belgium, Brazil, Colombia, Costa Rica, Cuba, Denmark, Dominican Republic, France, Great Britain, Guatemala, Haiti, Italy, Japan, Mexico, the Netherlands, Norway, Panama, Paraguay, Peru, Portugal, Spain, Sweden, Uruguay, and Venezuela.

I attach hereto a list of all the consular officers in Porto Rico, in which their names, rank, and residences and the countries they represent are given.

## NOTARIES PUBLIC.

In 1917-18, 22 lawyers were authorized to practice the notarial profession, after having registered in this office their signatures, marks, and seals, as provided by law. Notaries public are generally appointed in the States for a specific term regulated by statute and they can only act as such within the country or political division for which they are designated, but in Porto Rico, they have no fixed term of office, and may perform their duties throughout the island until their death, permanent physical disability, resignation, or disqualification.

A list of all notaries public registered in this office up to June 30, 1918, arranged in alphabetical order, is attached hereto.

## FEES.

The fees collected in this office in internal-revenue stamps, during the last fiscal year, are as follows:

Filing and registration fees, corporation papers.....	\$3,901.20
Registration of domestic trade-marks.....	863.50
Passports.....	1,625.00
Hunting licenses.....	1,150.00
Authentication of signatures and certified copies of documents.....	1,204.00
Registration of United States patents and trade-marks.....	138.00
Total.....	8,881.70

## BUREAU OF WEIGHTS AND MEASURES.

The unusual conditions of the business and economic life of the island, brought about by the world conflict now raging, but most especially by the entrance of the United States in the war, has made it imperative that the service of weights and measures should increase its vigilance to protect the public from the fraudulent practices of unscrupulous merchants. The rise in the price of all kinds of commodities has imposed upon the buying public the necessity of watching their purchases more closely. As the purchasing power of the money they usually invested has decreased, they now realize better the importance of exactness in the weight and the measure of the articles bought. Never had the public so well understood the benefits that are derived from an efficient service of weights and measures and never in the past had the situation required from the inspectors a greater zeal and activity to meet squarely the situation and maintain the high level of efficiency they must attain.

As soon as the Food Commission was created and organized the weights and measures service gave to them its most earnest cooperation in the enforcement of the food-control acts.

The strongest campaign waged during the year has been against the defrauders in the weight and measure of the three main staples of food, viz, bread, meat, and milk. A great number of cases were brought to the courts against these violators and though we have not been able to eliminate this fraud entirely, still a very noticeable progress has been made.

The percentage of the complaints filed on account of short weight or measure this year reached up to 47 per cent of the total number of complaints filed by the bureau as against 27.7 per cent for the previous year.

To fully appreciate the amount of work performed during the year we should not fail to take into consideration the fact that many of the local inspectors have worked on the local boards organized for the execution of the selective-service law, and that they were therefore unable to render their usual service under the bureau.

During the year the bureau issued 82 certificates of reweighings of merchandise made by our inspectors at the request of merchants, acting therefore as public weighers to establish the exact weight of merchandise received by them.

Statement No. 15 hereto attached gives a general idea of the work performed by the inspectors, both insular and municipal, in the inspection and testing of instruments and reweighing of packages in each municipality.

To enable an inspector to perform his functions efficiently it is of the utmost importance that he be equipped with a test set. Still the continued efforts of the bureau to have each municipal inspector be equipped with his test set, have as yet had no success. Much, however, has been accomplished, and it is to be hoped that before long every municipal inspector will be properly equipped.

Up to now there are 47 municipalities with their own test sets, 7 municipalities have already made appropriations for the purchase of a weights and measures equipment, due to the constant efforts of the bureau, and 4 municipalities are using test sets belonging to the insular government. So that by the end of the present fiscal year only nine towns will be without a permanent equipment.

The results of the inspection and testing of all the weighing and measuring instruments throughout the island is shown in Table 1.

The grand total of the instruments and weights in use tested this year reached up to 175,310 as against 150,003 for the previous year, and the total number of the new instruments and weights tested dropped to 28,056 this year as compared with 56,321 for 1916-17. This decrease no doubt is due to the difficulties in shipments, and also to the prevailing spirit of economy. Furthermore, on account of this world war the prices of all the weighing and measuring instruments have increased at least 50 per cent.

The percentage of the instruments found correct is nearly the same as last year. In 1916-17 we had 81.86 per cent. This year we found 81.75 per cent. This shows that the improved condition in which the instruments were found last year is still maintained. As to the apparatus condemned and confiscated, the notable decrease this year speaks highly in favor of the benefits that are derived continuously from the service of weights and measures. In the year 1915-16 the percentage of confiscated apparatus was 13.18 per cent, while in the following year it decreased to 6.91 per cent and this year it was only 3.73 per cent. The total number of instruments in use found incorrect, this including of course the ones adjusted by the inspectors, the rejected for repairs, and the condemned and confiscated, remained nearly the same as last year. The following are the percentages for the last three years: 1915-16, 24.28 per cent; 1916-17, 18.14 per cent; 1917-18, 18.25 per cent.

TABLE 1.—*Instruments tested.*

IN USE.

	Correct.	Percent- age. <sup>1</sup>	Last year's percent- age.	Corrected by inspec- tion.	Con- demned for repairs.	Percent- age. <sup>1</sup>
Counter scales.....	8,687	91.71	89.50	111	510	5.38
Spring scales.....	1,846	84.56	84.42	40	181	8.30
Platform scales.....	2,792	81.40	79.45	58	459	13.38
Weights.....	92,160	76.90	80.11	1,130	21,599	18.02
Linear measures.....	11,148	96.24	90.49	52	122	1.04
Liquid measures.....	28,220	93.41	85.92	173	727	2.93
Miscellaneous.....	8,459	90.55	79.31	26	262	6.84
Total.....	143,312	81.75	81.86	1,600	23,860	13.61

	Last year's percent- age.	Con- demned and con- fiscated.	Percent- age. <sup>1</sup>	Last year's percent- age.	New.	Total.
Counter scales.....	3.87	164	1.74	6.30	560	10,032
Spring scales.....	7.60	116	5.21	7.60	227	2,410
Platform scales.....	16.91	91	2.65	2.21	156	3,586
Weights.....	13.50	4,944	4.14	6.02	9,595	129,428
Linear measures.....	4.72	404	3.45	4.76	6,167	17,873
Liquid measures.....	2.00	735	2.96	11.96	6,765	31,620
Miscellaneous.....	1.12	84	2.19	19.57	4,586	8,417
Total.....	10.92	6,538	3.73	6.91	28,056	203,366

<sup>1</sup> This percentage is of the total number of this class of instruments tested.

<sup>2</sup> Computing scales, counter scales, milk bottles, measuring pumps, prescription scales, druggist weights, and glass graduated.

<sup>3</sup> Total number of instruments in use incorrect, 31,996, 18.25 per cent; 1916-17, 18.14 per cent; 1915-16, 24.28 per cent.



Table 2 shows the number of instruments, weights, etc., of Class I—that is, instruments, weights, etc., that are new, imported into or manufactured in the island and are submitted to the bureau for inspection and test, prior to being sold or offered for sale.

TABLE 2.—Class I: New instruments tested before being offered for sale.

	Scales.			Weights.	Measures.		Milk bot- tles.	Pre- scrip- tion scales.	Drug- gists' weights.	Glass gradu- ates.	Total.
	Counter.	Platform.	Spring.		Liquid.	Linear.					
San Juan.....	2,220	81	90	5,353	4,137	2,818	3,069	4	423	222	16,417
Ponce.....	205	65	123	3,088	1,026	2,360	.....	2	422	384	7,680
Mayaguez.....	31	6	7	63	990	743	.....	.....	.....	.....	1,930
Arecibo.....	47	2	.....	186	28	46	.....	.....	.....	.....	809
Other towns.....	57	2	2	905	594	200	.....	.....	.....	60	1,820
Total.....	560	156	227	9,595	6,765	6,167	3,069	6	845	666	28,056

If we throw a glance at Table 3, where year by year appears the final disposition made of the instruments rejected for repairs, we shall notice that the figures form two scales for each class of apparatus: An ascending scale referring to the number of apparatus sealed upon reinspection and a descending scale for those confiscated upon reinspection as incorrect and unrepairable. These scales show graphically that yearly the number of apparatus rejected for repairs that are sealed upon reinspection increases and there is a corresponding decrease in the number of those that are confiscated. There is, however, an exception in the spring scales, but this is due to the fact that once their springs stretch or break it is almost impossible to repair them or obtain substitute pieces.

TABLE 3.—Instruments rejected for repairs on first inspection and sealed or confiscated as incorrect and not susceptible of repairs upon reinspection.

	Counter scales.		Spring scales.		Platform scales. <sup>1</sup>		Weights.		Liquid measure.		Linear measures.	
	Sealed.	Confiscated.	Sealed.	Confiscated.	Sealed.	Confiscated.	Sealed.	Confiscated.	Sealed.	Confiscated.	Sealed.	Confiscated.
	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>
1914-15....	81	39	55	45	88	12	30	20	.....	.....	.....	.....
1915-16....	75	25	57	43	88	12	76	24	.....	.....	.....	.....
1916-17....	77	23	47	53	89	11	85	15	.....	.....	.....	.....
1917-18....	81.7	18.3	48.3	51.7	94.5	5.5	91.8	8.2	60	40	54	46

<sup>1</sup> Large capacity platform scales not included.

The clerical force of the bureau is not sufficient to keep complete statistics of the inspector's work, and for this reason it is not possible to give a table showing the errors found in all the weights tested during the year. So only a partial statement is given in Table 4 of errors found in different tests made during different periods of time in the year.

At the bottom of the table the average errors for three years are given. In 1914-15 this was found to be 8.18 grams per pound, in 1916-17 it had been lowered to 3.33 grams per pound, and this year it has come down to 3.15 grams per pound, only nearly double the permissible variation and representing mainly the natural wear of the weights during the year, which speaks highly of the efficiency of the bureau in eliminating the usual deficiency in the weights used in the stores.

TABLE 4.—*Errors found in weights.*

Size of weights.	Number.	Total error.
	<i>Pieces.</i>	<i>Grams.</i>
8 pounds.....	52	617
4 pounds.....	688	4,511
2 pounds.....	1,790	8,306
1 pound.....	1,633	6,494
8 ounces.....	1,293	4,684
4 ounces.....	1,058	2,661
2 ounces.....	788	1,670
1 ounce.....	506	750
Total.....	17,806	20,093

1 Weighing 9,420 pounds.

Average error per pound 1914-15=8.18 grams.

Average error per pound 1916-17=3.33 grams.

Average error per pound 1917-18=3.15 grams.

The work begun last year in San Juan of testing all the weighing and measuring apparatus in use or in stock in the drug stores was continued throughout the island, with the exception of Vieques and Culebra every town was inspected.

The main purpose of this inspection was not to oblige the drug stores to be equipped with fine, delicate apparatus with which to weigh or measure the drugs sold to the public, but rather to obtain a greater degree of exactness in the manipulation of the components that enter into the filling out of medical prescriptions. As a rule, the bureau has found the heartiest cooperation on the part of the druggists.

Outside of San Juan—the result of the inspection of the drug stores of this city appeared in the annual report for 1916-17—229 drug stores were inspected in 73 municipalities, 27 of which, or 12 per cent, were found to have their weighing and measuring instruments in perfect condition.

Three hundred and fifty-one scales were tested, and 239, or 68 per cent, were found correct. The remainder, or 112, were rejected for repairs.

Among the scales rejected for repairs 9 were unstable and 70 were out of balance, the differences between the sides of the scales as used, varying from 10 milligrams up to 1,620 milligrams. Seventy-one scales of class A (capacity, 15 grams) were found defective in their sensibility reciprocal, which varied from 15 up to 300 milligrams. The sensibility reciprocal of 7 scales, class B (capacity greater than 15 grams), was found to vary from 100 up to 250 milligrams.

Four thousand six hundred and thirty-two weights were tested, 901, or 19 per cent, were found incorrect and were confiscated, and 3,731 were sealed. Many of the confiscated weights belonged to illegal systems. The average errors in deficiency in the defective weights were as follows:

	Milli-grams.		Milli-grams.
For 20 milligrams.....	4	For 1 gram.....	64
For 50 milligrams.....	5	For 2 grams.....	62
For 100 milligrams.....	11	For 5 grams.....	113
For 200 milligrams.....	14	For 10 grams.....	153
For 500 milligrams.....	23	For 20 grams.....	265

The average errors in excess were:

	Milli-grams.		Milli-grams.
For 20 milligrams.....	5	For 1 gram.....	19
For 50 milligrams.....	9	For 2 grams.....	29
For 100 milligrams.....	13	For 5 grams.....	60
For 200 milligrams.....	17	For 10 grams.....	58
For 500 milligrams.....	26	For 20 grams.....	16

Two thousand and eighty-nine glass graduates were tested, 1,874 were found correct, and 215, or 10 per cent, were incorrect. The average error in excess was found to be 4.7 milligrams per 100 milligrams and 2.9 milligrams in deficiency.

The following are samples of some of the errors found in glass graduates:

In excess—	Milli-grams.	In deficiency—	Milli-grams.
Of 1,000 milligrams capacity.....	25	Of 2,000 milligrams capacity.....	26
Of 500 milligrams capacity.....	12	Of 1,000 milligrams capacity.....	36
Of 120 milligrams capacity.....	8	Of 500 milligrams capacity.....	17
Of 100 milligrams capacity.....	7	Of 250 milligrams capacity.....	11
Of 60 milligrams capacity.....	5	Of 150 milligrams capacity.....	8
Of 30 milligrams capacity.....	2.4		
Of 15 milligrams capacity.....	2		
Of 10 milligrams capacity.....	2		

Five hundred and twenty-eight graduates in stock were also examined. Eighteen, or 3.4 per cent, were found incorrect, same having been ordered reexported.

Of course, these rather fine results were due largely to the publicity given to the work made by the bureau in the drug stores of San Juan the year before. Most of the stores were found to be equipped with new scales, weights, and measures, the old ones having disappeared.

The following table, 5, is a résumé of the work done throughout the island:

TABLE 5.—*Drug stores inspected in the island.*

	Number of drug stores inspected	Weights.			Graduates.			Scales.		
		Found correct.	Confiscated.	Total.	Found correct.	Confiscated.	Total.	Found correct.	Defective and rejected for repairs.	Total.
Adjuntas.....	3	75	11	86	15	8	23	2	1	3
Agua de.....	2	30	3	33	8	2	10	4	2	6
Agua de Buena.....	4	175	38	213	29	5	34	1	1	2
Alfonso.....	1	8	12	20	3	5	8	1	1	2
Alfonso.....	3	20	18	38	13	13	26	3	1	4
Alfonso.....	4	53	30	83	23	10	33	5	1	6
Arcebo.....	10	206	35	241	136	12	148	8	7	15
Arroyo.....	3	33	16	49	19	3	22	4	2	6
Barceloneta.....	4	55	4	59	21	9	30	4	1	5
Barranquitas.....	2	21	7	28	17	4	21	2	1	3
Barros.....	2	24	13	37	20	1	21	1	1	2
Bayamón.....	6	142	10	152	62	2	64	5	5	10
Cabo Rojo.....	3	42	17	59	13	6	19	2	2	4
Caguas.....	9	152	66	218	101	3	104	11	3	14
Camuy.....	3	36	10	46	13	3	16	2	2	4
Carolina.....	3	56	14	70	14	1	15	3	1	4
Cayey.....	4	44	1	45	20	1	21	6	1	7
Ceiba.....	1	41	1	42	5	2	7	3	1	4
Ciales.....	5	76	29	105	27	1	28	7	1	8
Cidra.....	2	20	2	22	9	1	10	3	1	4
Coamo.....	2	49	13	62	18	4	22	2	1	3
Comerio.....	2	44	2	46	13	1	14	2	1	3
Corozal.....	1	13	4	17	22	1	23	2	1	3
Dorado.....	1	8	5	13	3	1	4	1	1	2
Fajardo.....	5	107	24	131	56	4	60	7	2	9
Guánica.....	2	37	1	38	22	1	23	3	2	5
Guaynabo.....	1	6	1	7	2	1	3	1	1	2
Guayama.....	5	44	4	48	67	2	69	4	2	6
Guayanilla.....	3	59	4	63	18	5	23	1	3	4
Gurabo.....	1	28	1	29	7	1	8	1	1	2
Hatillo.....	1	13	1	14	6	1	7	2	1	3
Hormigueros.....	1	1	1	2	2	1	3	1	1	2
Humacao.....	5	100	7	107	28	2	30	5	3	8
Isabela.....	3	49	8	57	15	5	20	2	1	3
Jayuya.....	3	23	6	29	9	6	15	2	1	3
Juana Díaz.....	4	55	22	77	79	9	88	5	1	6
Juncos.....	4	41	17	58	29	2	31	2	3	5
Lajas.....	1	15	10	25	5	1	6	1	1	2
Lares.....	1	12	6	18	22	1	23	1	1	2
Las Marías.....	1	14	1	15	5	1	6	1	1	2
Las Piedras.....	1	12	1	13	2	1	3	1	1	2
Lofa.....	2	21	10	31	12	1	13	1	2	3
Luquillo.....	1	12	1	13	7	1	8	1	1	2
Manatí.....	4	56	49	105	29	5	34	6	2	8
Maricao.....	1	19	6	25	2	1	3	1	1	2
Maunabo.....	2	55	7	62	28	1	29	2	2	4
Mayaguez.....	11	137	45	182	126	7	133	14	6	20
Moca.....	2	12	1	13	8	2	10	1	1	2
Morovis.....	3	34	6	40	16	1	17	1	2	3
Naguabo.....	4	41	9	50	20	1	21	3	1	4

TABLE 5.—*Drug stores inspected in the island—Continued.*

	Number of drug stores inspected.	Weights.			Graduates.			Scales.		
		Found correct.	Confiscated.	Total.	Found correct.	Confiscated.	Total.	Found correct.	Defective and rejected for repairs.	Total.
Naranjito.....	2	32	.....	32	9	.....	9	2	.....	2
Patillas.....	2	81	6	87	14	1	15	2	2	4
Peñuelas.....	1	12	.....	12	6	1	7	1	.....	1
Ponce.....	19	346	95	383	176	28	204	22	12	34
Quebradillas.....	2	20	11	31	22	4	26	3	.....	3
Rincón.....	1	29	6	35	8	2	10	5	1	1
Río Grande.....	2	26	4	30	5	.....	5	1	.....	2
Rio Piedras.....	5	109	4	113	54	3	57	6	1	8
Sabana Grande.....	2	34	9	43	19	.....	19	1	3	4
Salinas.....	3	66	9	75	23	.....	26	6	1	7
San Germán.....	6	77	20	97	53	12	65	9	1	10
San Lorenzo.....	3	59	.....	59	14	.....	14	3	1	4
San Sebastián.....	4	49	9	58	34	4	38	4	1	5
Santa Isabel.....	1	29	4	33	8	1	9	1	.....	1
Tea Alta.....	1	21	.....	21	8	.....	8	2	.....	2
Tea Baja.....	2	25	1	26	19	1	20	1	3	4
Trujillo Alto.....	2	23	.....	23	5	.....	5	1	1	2
Utuado.....	4	71	35	106	44	3	47	6	2	8
Vega Alta.....	2	19	12	31	14	1	15	3	.....	3
Vega Baja.....	3	46	61	107	35	3	38	3	3	6
Villalba.....	2	34	3	37	9	.....	9	1	2	3
Yabucoa.....	3	66	21	87	18	2	20	3	.....	3
Yauco.....	5	82	58	140	62	9	71	7	1	8
Total.....	229	3,731	901	4,632	1,874	215	2,089	239	112	353

The inspection of sugar-cane scales in the past fiscal year was made while said scales were being used—i. e., during the crop season.

Out of 92 railroad scales inspected, 49, or 53.3 per cent, were found correct, against 35.3 per cent for last year's inspection. At least one-third of these are narrow-gauge railroad scales. Out of 183 cart scales inspected, 96, or 52.4 per cent, were found correct. Last year's percentage was only 46.1. Six hundred and ninety-four counter-weights were examined, 651 of which, or 93.8 per cent, were found O. K., against 84 per cent for the year 1916-17. The noticeable increase this year in the percentage of the scales and weights found correct shows that the surest way to put an end to the negligence on the part of the owners of these scales to keep them in good condition is to inspect said scales during the crop, without any notice whatever of the inspectors' visit, and to hold them responsible for the errors found in their instruments.

In examining Table 6 it will be noticed that while the percentages of correct scales and weights are greater this year, the percentages of those adjusted by the inspectors are smaller. This is due to the practice followed in the past, whereby the inspectors were supposed to help and teach as much as they possibly could the owners of the scales found incorrect to remedy the defects, and therefore they often performed a mechanical work entirely out of their duties. Of course, this policy was in accordance with the one adopted by the bureau ever since its creation, and which can be condensed in these words: "Educate before you demand responsibilities." Now, the period of education should be considered at an end, and the owners of the scales used in the weighing of the sugar cane should be held responsible.

The same reason that caused a decrease in the percentage of the scales adjusted by the inspectors caused an increase in the percentage of those rejected for repairs. Still, the greater number of errors found in the scales rejected for repairs were not serious enough to warrant a judicial action. The number of cases brought before the courts is, therefore, quite small.

TABLE 6.—*Inspection of large capacity platform scales used to weigh sugar cane.*

## FIRST INSPECTION.

	Found correct and sealed.			Adjusted by the inspectors.			Rejected for repairs.			Total.
	Num-ber.	Per cent.	Last year's per cent.	Num-ber.	Per cent.	Last year's per cent.	Num-ber.	Per cent.	Last year's per cent.	
Railroad scales.....	49	53.3	35.3	15	16.3	54.4	28	30.4	10.3	92
Cart scales.....	96	52.4	46.1	37	20.2	31.4	50	27.4	22.5	153
Weights.....	651	93.8	84.0	22	3.2	8.5	21	3.0	7.5	694

## REINSPECTION OF ABOVE-REJECTED SCALES.

	Found correct.	Still rejected for repairs.	Total.
Railroad scales.....	13	1	13
Cart scales.....	20	1	21

## RECAPITULATION.

	In-spected.	Rein-spected.	Total.
Railroad scales.....	92	13	105
Cart scales.....	183	21	204
			309

The following Table 7 will give an idea of the reweighings made by the inspectors of deliveries of colonos' cane to centrales. This table shows only a part of the reweighings made. The limited office force of the bureau and the changes that occurred in the same during the year made it impossible to compile fuller statistical data. Still the data shown in the table is ample enough to convey an exact idea of the conditions in which those reweighings were found to be. The weight noted refers naturally to the weight written down by the centrales' weighers on the tickets they give to the colonos. If the weight noted agrees with the weight of the cane as found by the inspectors' reweighing it is classified as O. K. If the weight is less than the inspectors' weight the wagon or cart is classified as deficient (—) and as (+) in excess if the weight of the weigher is greater than the inspectors'.

Out of 48 railroad cars or narrow-gauge cars reweighed, 14 only, or 29 per cent, were found deficient. Of 32 oxcarts reweighed, 4 only, or 12.5 per cent, were deficient. These errors were so small, however, that only two weighers were brought before the courts for short-weighing colonos' cane.

TABLE 7.—*Reweighings of cane deliveries.*

	Weight accused, hundred-weights.	Number of wagons, cars, or carts.		
		O. K.	+	—
48 wagons or small cars.....	12,419.45	34	.....	<sup>1</sup> 14
32 carts.....	1,721.85	27	1	<sup>1</sup> 4
Total.....	14,141.30			

<sup>1</sup> Or 29 per cent.<sup>1</sup> Or 12.5 per cent.

The important work of reweighing purchases made by the public was continued vigorously during the last fiscal year, and with excellent results. The 251,306 packages that were thus investigated had a total weight or measure of 580,929 pounds, 6,136 yards, and 5,616 quarts. The total number of packages reweighed the year before had been 162,387, the increase this year being 88,919 packages, or 35 per cent. The percentage of the correct packages has increased year after year, this being a proof that the activities of the weights and measures inspectors have been fruitful. In 1914-15 the percentage of correct packages was 69.93; in 1915-16, 72 per cent; 1916-17, 76 per cent; and this year, 81.89 per cent.

A slight increase also is noticeable in the percentage of the packages found deficient as it is 4.44, while last year it was only 3.43. No doubt this is due to the intense fight waged against the defrauders this year and to the fact that the high prices were a greater incentive to defraud.

The following Table 8 is a résumé of the reweighings made in each municipality:

TABLE 8.—*Reweighings of packages.*

Towns.	Municipal inspectors.			Insular inspectors.			Insular police. <sup>1</sup>			Total.		Weight and measure of packages reweighed.		
										Total.		Pounds.	Yards.	Quars.
	Correct.	Heavy.	Light.	Correct.	Heavy.	Light.	Correct.	Heavy.	Light.					
A adjuntas.....	5,546	530	274	24	.....	.....	5,870	530	274	6,674	.....	17,050	386	43
Aguada.....	13,139	3,425	202	15	.....	.....	13,641	3,543	271	17,455	.....	21,721	253	.....
Aguadilla.....	.....	253	.....	69	7	14	487	.....	.....	17,455	.....	2,496	.....	.....
Aguas Buenas.....	906	.....	22	.....	.....	.....	906	253	22	1,151	.....	995	30	1
Albionito.....	760	.....	1	12	35	.....	772	35	.....	808	.....	816	455	43
Alasco.....	6,156	3,319	370	93	18	.....	6,249	3,337	370	9,956	.....	26,564	766	495
Arcebo.....	676	.....	2	396	53	192	1,112	77	195	1,384	.....	1,520	.....	.....
Arroyo.....	403	361	107	19	3	.....	424	364	107	895	.....	992	.....	.....
Barceloneta.....	646	6	25	43	10	28	655	16	53	2,024	.....	1,656	262	3
Barranquitas.....	.....	.....	.....	.....	.....	.....	11	9	2	2	.....	.....	.....	.....
Barros.....	133	43	15	103	.....	.....	11	9	2	2	.....	.....	.....	.....
Bayamon.....	90	89	24	87	46	211	484	70	16	570	.....	3,532	100	15
Cabo Rojo.....	2,841	486	165	440	148	1	589	138	235	962	.....	1,269	36	52
Caguas.....	108	106	8	271	42	59	3,301	634	166	4,101	.....	7,821	649	253
Camuy.....	66	56	99	84	9	43	445	148	79	672	.....	1,994	98	35
Carolina.....	897	2,635	1,258	40	.....	.....	150	65	142	357	.....	539	.....	.....
Cayey.....	3,831	2,266	177	14	24	8	397	2,635	1,258	4,830	.....	5,190	18	4
Cebalva.....	273	.....	.....	.....	.....	.....	3,970	2,260	185	6,445	.....	13,830	5	.....
Ciales.....	391	19	2	.....	.....	.....	317	3	1	321	.....	219	.....	.....
Cidra.....	3,218	92	265	19	3	1	391	19	2	412	.....	3,189	70	63
Cosmo.....	5,206	1,035	13	414	.....	.....	3,237	95	296	3,638	.....	5,433	.....	.....
Comerio.....	.....	.....	.....	.....	.....	.....	6,118	1,063	13	7,214	.....	13,662	161	276
Corceal.....	.....	.....	.....	.....	.....	.....	48	.....	.....	48	.....	78	.....	.....
Culebra.....	.....	.....	.....	.....	.....	.....	14	.....	.....	14	.....	25	.....	.....
Porado.....	57	4	38	2	7	25	53	7	.....	130	.....	15	.....	.....
Puerto Rico.....	670	10	140	1	55	76	683	134	226	1,063	.....	1,268	.....	.....
Guayama.....	677	.....	.....	69	38	.....	798	30	.....	917	.....	980	.....	15
Guaynabo.....	712	295	62	69	55	76	793	314	138	1,233	.....	2,454	23	.....
Guayama.....	1,773	928	283	84	.....	.....	1,295	594	263	2,492	.....	4,922	.....	.....
Guayanilla.....	159	3	.....	.....	.....	.....	638	24	17	690	.....	1,221	94	.....
Guayama.....	.....	.....	.....	71	16	14	71	29	18	118	.....	1,128	.....	1
Hatillo.....	1,297	.....	.....	23	.....	.....	1,289	.....	.....	1,289	.....	1,305	.....	90
Hermigueros.....	4,967	13	.....	13	.....	.....	5,179	13	.....	5,192	.....	7,188	51	.....
Humacao.....	30	35	3	.....	.....	.....	30	53	3	86	.....	233	.....	3
Isabela.....	3,829	35	.....	47	1	2	3,876	36	37	2,949	.....	2,712	70	66
Jayuya.....	509	5	.....	269	.....	.....	778	6	.....	788	.....	1,903	19	.....
Juana Diaz.....	.....	.....	.....	105	4	45	240	42	40	331	.....	540	3	.....
Juncos.....	34	8	.....	20	.....	.....	234	8	.....	242	.....	214	15	26
Lajas.....	1,652	261	87	352	91	2	2,004	342	89	2,435	.....	3,465	8	.....
Lares.....	1,151	165	60	.....	.....	.....	1,152	166	64	1,381	.....	3,432	98	54

Las Mercedes.....	439	110	89	189	10	104	501	116	49	766	1,044	22	20
Las Piedras.....	1,038	28	10	19	37	1	1,052	60	56	1,767	2,426	26	20
Ledra.....	116	31	1	14	1	6	129	32	6	1,167	3,191	.....	.....
Liquillo.....	1,300	40	1	88	28	13	1,386	68	12	3,429	8,778	117	111
Mantú.....	2,023	900	4	58	10	181	2,084	800	5	6,963	12,641	86	37
Martelo.....	6,150	117	72	53	1	.....	6,364	127	72	12,155	21,087	69	51
Mamabo.....	5,084	117	3,142	53	10	.....	5,220	5,064	3,142	22,945	38,683	36	256
Mayaguez.....	20,064	534	39	1,881	273	66	22,081	898	106	1,835	3,761	41	3
Moca.....	1,671	74	.....	71	1	19	1,761	74	.....	9,056	14,419	.....	32
Morovis.....	5,129	3,236	319	156	114	53	6,314	3,350	372	1,432	1,875	79	8
Naguabo.....	.....	.....	.....	40	25	963	984	345	93	48,510	219,196	8	2,069
Naranjito.....	.....	.....	.....	397	3	.....	42,881	335	294	382	6,685	7	.....
Peduelas.....	.....	.....	.....	129	16	88	352	.....	31	675	1,168	3	1
Ponce.....	42,752	319	289	12	.....	.....	352	89	75	4,270	10,707	467	276
Quebradillas.....	368	.....	.....	14	24	.....	352	.....	426	9,731	13,172	184	203
Rincon.....	580	65	24	35	7	.....	555	646	75	6,253	8,871	13	81
Rio Grande.....	520	.....	.....	47	36	885	3,549	646	75	2,417	4,061	3	6
Rio Piedras.....	3,169	999	39	380	47	.....	8,426	879	22	6,846	9,468	5	.....
Sabana Grande.....	7,268	760	378	253	88	31	8,426	879	22	6,846	9,468	5	.....
Salinas.....	378	166	15	361	3	48	5,908	239	116	6,253	8,871	13	81
San German.....	4,739	119	94	1,164	120	.....	5,978	435	40	2,417	4,061	3	6
San Juan.....	3,322	96	55	5,536	370	120	2,743	40	39	6,846	9,468	5	.....
San Lorenzo.....	54	15	.....	189	25	2	2,743	40	39	6,846	9,468	5	.....
San Sebastian.....	1,393	33	100	24	2	766	2,743	40	39	6,846	9,468	5	.....
Santa Isabel.....	4,841	806	234	405	4	.....	5,217	810	339	2,417	4,061	3	6
Toca Alta.....	.....	.....	.....	15	.....	.....	75	.....	2	109	204	5	.....
Toca Baja.....	40	11	2	110	1	25	75	32	2	109	204	5	.....
Trujillo Alto.....	83	3	1	119	1	.....	202	276	14	2,067	8,579	.....	.....
Utracheo.....	1,761	276	14	136	.....	.....	1,767	276	14	2,067	8,579	.....	.....
Vega Alta.....	488	193	77	189	8	.....	654	218	3	1,593	5,712	82	47
Vega Baja.....	830	591	41	617	30	.....	1,253	675	41	1,593	5,712	82	47
Villalba.....	.....	.....	.....	145	84	.....	145	.....	.....	1,593	5,712	82	47
Yabucoa.....	2,469	353	37	27	27	.....	2,505	380	27	2,912	5,144	70	80
Yauco.....	2,638	468	23	223	12	.....	2,638	628	456	2,912	5,144	70	80
Total.....	183,167	31,352	9,317	16,437	2,009	900	205,809	34,291	11,206	251,306	580,929	6,136	5,616
Per cent.....	81.83	14.02	4.15	82.40	10.07	12.01	81.89	13.67	4.44	98.02	98.02	1.04	0.94
Total and per cent:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1916-17.....	.....	.....	.....	.....	.....	.....	76.16	20.41	3.43	162,357	.....	.....	.....
1915-16.....	.....	.....	.....	.....	.....	.....	72	24	4	147,738	.....	.....	.....
1914-15.....	.....	.....	.....	.....	.....	.....	69.93	23.06	6.11	88,022	.....	.....	.....

<sup>1</sup> In some municipalities the Insular police have failed to report their reweighings to this bureau.



Table 9 is a résumé of the violations of the weights-and-measures law and of its rules and regulations presented to the courts of the island that were reported by the insular and municipal inspectors and by the insular police.

Though the total number of cases reported is smaller than last year, still the total amount of fines imposed by the courts is 18 per cent greater than for 1916-17, and this must be due to greater severity on the part of some judges. The average fine this year is \$4.64 against \$3.37 for last year. In several instances fines of \$50 or more were imposed for second or third offenses. Some progress has been made, but still the degree of severity desired has not been reached, and as long as the majority of the judges are satisfied with the imposition of one or two dollar fines on persons who time and again defraud the purchasing public, it will continue to be a paying business for the unscrupulous dealers to run the risk of being caught and fined a couple of dollars while month after month they defraud the public and enormously increase their gains by their fraudulent practice.

TABLE 9.—*Violations.*

	Number.	Con- victed.	Ab- solved.	With- drawn.	Fines.	Jail sentences.
Cases denounced by—						<i>Days.</i>
Insular inspectors.....	487	434	51	2	\$2,246	10
Municipal inspectors.....	223	190	33	.....	823	.....
Insular police.....	472	419	53	.....	1,776	.....
Total, 1917-18.....	1,182	1,043	137	2	4,845	10
Total, 1916-17.....	1,345	1,215	104	26	4,102	234
Total, 1915-16.....	1,046	924	.....	.....	.....	.....

188.24 per cent.

90 per cent.

88 per cent.

Table 10 shows the sections of the law and of the rules and regulations violated during the year that gave rise to the complaints filed.

The violations of section 15 of the weights-and-measures law and of law No. 13 of 1917, referring in the majority of cases to short weight and short measure, reach a total of 559, this being 47 per cent of the total number of complaints filed as compared with 27.7 per cent for the previous year. This increase is due, of course, to the energetic campaign waged to protect the public against defrauders on account of the high cost of living.

TABLE 10.—*Detail of violations.*

Sections of the law under which cases were filed.	Number of cases presented to the courts.	Con- victed.	Ab- solved or with- drawn.
Sec. 15: Short weight or measures.....	488	415	73
Sec. 14: Defective or faulty instruments or weights.....	201	192	9
Sec. 17: Requiring net weight of contents in boxes, packages.....	125	110	15
Sec. 19: Alteration to weights and measures after having been sealed.....	88	83	5
Act No. 13 of 1917: Regulating the weight of loaves of bread requiring indication of the price per pound.....	71	50	12
Sec. 10: Weights or measures in use without having been tested.....	65	63	2
Par. 27: Rules and regulations requiring weight label on loaves of bread.....	34	27	7
Sec. 18: Marking of false weight or false tare on boxes, packages, etc.....	27	22	5
Sec. 16: Use of illegal weights and measures.....	25	23	2
Sec. 12: Use of new weights or measures without having been tested.....	24	22	2
Par. 28: Requiring dry commodities to be sold by weight or measure only.....	11	10	1
Par. 21: Requiring new weights and measures to be submitted for test.....	5	3	2
Resolutions, Food Commission.....	4	2	2
Sec. 1: Establishing standard system of weights and measures.....	3	3	.....
Sec. 7: Use of the <i>cuartillo del pais</i> after being abolished.....	3	3	.....
Sec. 13: Failure to present weights and measures to the inspectors upon request.....	2	1	1
Par. 23: Requiring sale of commodities by net weight or measure.....	1	1	.....
Sec. 470, Penal Code: Defrauding of labor.....	1	1	.....
Total.....	1,182	1,043	139

In order that this bureau may render a more efficient and complete service, I would strongly recommend that two more positions be added to the force of insular inspectors of weights and measures, in order that one of such inspectors may be at all times during the year in each of the judicial districts of the island, with the exception of San Juan, where two inspectors are absolutely necessary, due to the greater importance of the capital city of the island and the larger number of stores and business transacted in this district.

I would also recommend that the salary of the inspectors be increased to that which they enjoyed when the bureau was created and organized, i. e., \$1,200 per annum.

#### BUREAU OF SUPPLIES, PRINTING, AND TRANSPORTATION.

The total amount of business handled during the year reached the sum of \$1,822,161.09, representing an increase over last fiscal year of \$517,121.53, or 40 per cent more. As the total amount paid during the year for salaries and contingent expenses was \$33,988.60, the operating cost of the bureau was a little more than 1.86 per cent of the total amount of business.

The total purchases amounted to \$839,075.34, constituting an increase over last year of \$231,377.60, or 38 per cent. Of this amount, \$672,983.86 was purchased from merchants in Porto Rico, an increase over last year of \$224,935.58, or 50 per cent.

Purchases from merchants in the United States amounted to \$166,091.48, an increase over last year of \$6,442.02, or 4 per cent. As was the case last year, all purchases made in the States this year consisted mostly of textbooks, heavy machinery, and supplies that could not be obtained in Porto Rico.

The total sales for the year amounted to \$904,831.78, an increase over last year of \$283,508.56, or 46 per cent.

To give a slight idea of the work done in the supply division of the bureau, I may add that during the fiscal year just ended 8,478 requisitions were received from the several departments and offices of the Government, 19,003 orders were issued to merchants and contractors, 12,043 invoices were received from them, 14,342 bills were rendered to the departments, and 5,357 vouchers were issued for payment to local merchants.

Due to the abnormal market conditions created by the war, the bureau has found serious difficulties in replenishing its stock, and the delivery to it of certain articles has been delayed for more than three or four months, thus making it impossible for the bureau to fill immediately or only with a short delay the requisitions received for such articles.

In order to render the most efficient service possible, under the conditions with which the bureau has now to contend, it has been necessary for the personnel of the supply division to work the greater part of the year evenings and holidays, but, notwithstanding this, the amount of work has increased so considerably that it has been impossible to eliminate entirely some delay in the purchase and delivery of certain articles as well as in the payment of the bills. Three additional clerks are needed if it is desired to keep the work of the bureau up to date, as required by the good of the service.

The net output of the printing division during the year amounted to \$71,173.68, showing an increase over last year's amount of \$7,980.48, or 13 per cent.

During the year 3,232 jobs were undertaken, the most important being the printing and binding of the laws of Porto Rico, the decisions of the supreme court both in English and Spanish, the opinions of the attorney general, the Journal of the Senate, etc. The Porto Rico School Review and the Journal of Agriculture are also printed by this division.

The transportation division shows a running for all cars of 138,127 kilometers in 681 trips, an increase over last year of 21,240 kilometers. The average cost per kilometer is 13 per cent. This shows an increase in cost over last year of 2.2 cents per kilometer. This slight increase is due to the fact that the division is working now with old cars, which require frequent repairs, as well as to the advances in the prices of gasoline, tires, and other automobile supplies.

All the cars for the service have been running for such a long time that they have gradually become worn out, and it has been necessary to make repairs to them almost every time they return from a trip. It was necessary to hire cars for 22 trips, and in some cases the departments themselves had to hire private cars because the bureau had none available to furnish the service.

One important improvement made in the last fiscal year was the purchase for this division of a truck for the delivery of goods. Prior to the purchase of this truck wagons had to be hired for hauling freight from the dock to the bureau, a very old passenger car had to be used for transporting provisions to the prisoners' camps and small delivery horse wagon for delivering supplies to the departments. All this work

is now undertaken by the truck, with a gain in efficiency and a saving of time and expense to the Government that have repaid with excess the money invested in the purchase of said truck.

To properly handle the increasing business of this division it would be necessary to purchase two additional five-passenger cars, thereby increasing the number of cars in the bureau for public service from seven to nine. Experience has proved that there is no saving in hiring extra chauffeurs, as they do not give the cars proper attention, the results being delays on the roads and increased expenses. Under the circumstances it would be a good measure to have two additional regular chauffeurs in the bureau.

The law regulating the automobile service of the people of Porto Rico was amended at the special session held in the month of March, 1918, so as to except from the operation of the law the automobile used by the Resident Commissioner at Washington and those that may be required by the president of the senate and the speaker of the house of representatives.

The working capital fund of the bureau is only \$25,000, to be used for the purpose of furnishing and keeping on hand standard materials, supplies, and equipment required by the different branches of the insular government. Section 19 of joint resolution No. 14 of 1916 imposes upon the heads of departments and other officers of the government ordering supplies, printing, or transportation the duty of making transfers of funds to the bureau upon the request of the secretary of Porto Rico. The books of the bureau on July 1, 1917, showed balances of \$10,000 and \$20,000 of advances made by the irrigation service and the department of education, respectively, during the previous year. The balance due from the advance of the irrigation service was refunded on November 30, 1917, and that of the department of education on February 28, 1918. During this year advances were requested and secured from the interior department in the amounts of \$20,000 on August 2, and \$25,000 on September 19, 1917. Due to the fact that these two transfers were made from a fiscal year appropriation the bureau was requested to refund the department of the interior \$20,000 on June 10 and \$25,000 on June 30. Under the circumstances the bureau was practically left to depend on its own resources to meet its obligations during the months of May and June, and the auditor of Porto Rico had to stop the payment of bureau vouchers in order to make up a sufficient balance of money to the credit of the bureau to effect the reimbursements to the department of the interior. The fact that the bills due to the bureau for supplies, printing, etc., were not promptly paid made the financial conditions of the bureau still worse. The necessary steps were taken to relieve this situation, but all appropriations were so depleted at the time that no advances of funds could be secured to prevent such an embarrassing financial situation, and in order that the bureau may keep in stock sufficient quantities of standard supplies and materials to meet promptly the demands from all branches of the Government it is earnestly recommended that the working capital fund of the bureau be increased to \$75,000, which is a very moderate amount, taking into consideration the fact that the annual volume of business of the bureau is now more than \$1,806,000.

#### SUPPLY COMMITTEE.

Thirty-five meetings were held and 367 resolutions adopted by this committee from July 1, 1917, to June 30, 1918. The number of contracts awarded during the fiscal year was 318.

The increase in the total work of the committee was due not only to the increase in the whole amount of the business transactions made, but also to the fact that on account of the uncertainty of market conditions the committee was not able to make any contract running for a period of 12 months as in previous years and had to make call for bids to cover supplies for 6 months or less to secure a larger number of bidders. Merchants were reluctant to make contracts for supplies for so long a time as one year as the prices of all goods were rapidly going up, and they could not fix in advance with any degree of accuracy the maximum limit the prices were going to reach.

The procedure now followed in the purchases for the departments of certain articles which the bureau does not have in stock is as follows: Once the requisition is received the local buyer proceeds immediately to the acquisition of the articles specified therein if the value thereof does not amount to \$300. In case the amount of the purchase is \$300 or more then a call for bids is made 30 days from the date of the call being allowed for the opening of the bids, except in urgent cases, in which the bids are opened within a shorter time. Description of the articles needed is made in the call for bids with as much detail as is possible under the specifications submitted by the department interested in the purchase, and when there is also

lutely no other way of describing the article than by giving the trade mark this is inserted in the blank forms for bids, but with the additional remarks that the article asked for does not need to be of the same brand and that the trade name is used simply to designate the quality. In this way every manufacturer of the same kind of article is offered the opportunity of making a bid and the government may be able to secure better class of goods at the cheapest price.

After the bids are opened a tabulated statement is made showing the prices and conditions quoted by every bidder, giving each bidder a number and withholding their names so as to avoid any ground for complaints of partiality or favoritism in the selection of the supplies. Said statement, together with the samples received, from which, however, all identifying marks have also been eliminated, is submitted to the head of the department concerned, in order that he may be able to make the selection of the article best suited for the purpose.

The recommendation of the heads of departments is generally followed and the supply committee makes the awards, or rejects all bids when prices are unreasonable or articles offered do not conform to specifications, in accordance with said recommendation, except when this is made in favor of a bidder who is not the lowest one, in which case the award is made to such bidder only when sufficient and good reasons are given by the head of the department or office to warrant the disregarding of the proposals of the lowest bidders. If the reasons are not satisfactory, the supply committee insists on having the selection made in favor of the lowest bidder as provided by law.

It is an invariable rule of the supply committee not to accept any new bid after the hour fixed in the call, nor any modification of the bids submitted after the opening thereof, and in considering prices for provisions when awards are going to be made valuable information is often secured from the Food Commission as to current prices and market conditions.

This system is working well and smoothly, and I think is completely fair and satisfactory not only to the departments but to all the manufacturers and merchants who are dealing with the Government and who should be treated with absolute impartiality and justice. By the employment of said system, the supply committee has been able to make a number of contracts at prices lower than the normal prices in the market, with a considerable saving in the expenditure of the public funds.

A new requirement was inserted during the year in the blank forms for bids, to the effect that a temporary bond of 10 per cent of the total amount of the bid, in the form of a certified check, must accompany each and every proposal, said bond to be held by the supply committee in the case of successful bidders until the goods contracted for are delivered. A bond had been therefore required only from bidders for supplies whose value was in excess of \$1,000, but as in some cases certain bidders have refused to deliver the articles after the contract has been awarded to them, due to changes in the condition of the market or for some other reasons, and the committee had no bond in hand to forfeit as a compensation for the loss the people of Porto Rico was going to suffer, the adoption of the above-mentioned rule became absolutely necessary.

The supply committee during the fiscal year also authorized contractors for the furnishing of bread to Government institutions to deliver, on wheatless days, bread made of substitutes of wheat, thus earnestly helping in the campaign for the saving of an article of food so essential for the successful prosecution of the war.

I am very glad to say that, although it has been impossible to secure the presence of all the members of the supply committee in most of the meetings held in 1917-18, due to the pressure of some other governmental work upon the time of the absent members, there has always been a quorum, and the two members present at each meeting have discussed and considered the questions submitted in the most cordial manner and in the best spirit of cooperation.

## EXPENDITURES.

The expenditures of this office during the last fiscal year were as follows:

Appropriations.	Office of the executive secretary.	Bureau of weights and measures.	Bureau of supplies, printing, and transportation.	Total.
Salaries.....	\$31,113.85	\$11,092.05	\$26,123.20	\$68,929.10
Stationery and printing.....	667.55	159.23	859.88	1,685.66
Furniture.....	81.78		184.80	266.58
Postage and freight.....	418.00	1,065.81	422.92	1,906.73
Telegraph and telephone.....	12.62	27.45	286.15	326.22
Incidentals.....	1,504.46	270.81	211.07	1,986.34
Traveling expenses.....		4,262.71	51.87	4,314.58
Equipment of weights and measures.....		427.63		427.63
Care of animals.....			630.30	630.30
New York office:				
Salaries.....			3,889.17	3,889.17
Rent.....			924.96	924.96
Stationery and printing.....			372.92	372.92
Telegraph and telephone.....			32.36	32.36
Total.....	33,798.26	17,905.69	33,988.60	85,692.55

## PERSONNEL.

On August 31, 1917, the undersigned was nominated by the governor, in accordance with the provisions of section 22 of the organic act, for the position of executive secretary of Porto Rico, which had been temporarily occupied by him since March 2, 1917. According to section 56 of the same act, such temporary appointment was to expire not later than 20 days from and after the assembly and organization of the new legislature. As this convened on August 13, 1917, and as the term of 20 days elapsed before confirmation of the nomination by the Senate, the undersigned ceased in the performance of his duties as such executive secretary on September 2, 1917. The nomination, however, was confirmed by the Senate on September 4, 1917, and the undersigned took anew the oath of office on the same day.

Some important changes were made in the personnel of this office during the fiscal year. Mr. Eduardo J. Saldafia was promoted to the position of assistant executive secretary. Mr. Juan M. Herrero was appointed chief clerk, and Mr. Manuel Arroyo was promoted to the position of chief of the bureau of supplies, printing, and transportation.

The work done by the personnel of this office and the two bureaus assigned to it during the last fiscal year has been three or four times more than before the entrance of the United States into the war, and as the number of employees can not be increased without authorization from the legislature, it has been necessary for some of the officers and employees to work during extra hours and on holidays to render a good service to the public. Sometimes we have been working under very trying circumstances, due to the fact that our personnel had been reduced either because some of the men were inducted into the military service or because others had gone to private concerns which had offered them higher salaries and more favorable terms.

It has been very difficult to fill vacancies, both on account of the scarcity of suitable personnel and of the low salaries paid by the Government in relation to the constantly growing increase in the cost of living.

I am very pleased to state, however, that not only my assistants but all the employees working under my direction have on every occasion shown a fine disposition to comply with their duties in the most satisfactory manner, and to bear their increased burden in a very commendable spirit of cooperation and patriotism, in which endeavors they have been remarkably successful. They deserve at this time a readjustment of their salaries to meet the actual existing conditions of life, and so I recommend it.

Respectfully submitted,

R. SIACA PACHECO,  
Executive Secretary of Porto Rico.

The GOVERNOR OF PORTO RICO, San Juan, P. R.

STATEMENT 1.—*List of commissioners of deeds for Porto Rico in the United States, appointed by the Governor of Porto Rico, and whose commissions are still in force on June 30, 1918.*

Name and address.	State.	Appointed.
Arroyo, Julián A., 82 Wall Street, New York City.....	New York.....	Aug. 6, 1915
Auff, Harmon O., 31-33 Deaderick Building, Knoxville.	Tennessee.....	Nov. 16, 1914
Braman, Ella F., 120 Broadway, New York City.....	New York.....	July 17, 1914
Braman, Joseph B., 120 Broadway, New York City.....	do.....	Jan. 25, 1915
Heese, Charles Henry, 2017 East Eager Street, Baltimore.	Maryland.....	June 1, 1917
Hitt, Isaac R., 317-318 Maryland Building, Washington	District of Columbia.....	June 28, 1916
Michelson, Adolph, room 430, Old Birks Building, Montreal.	Province of Quebec, Canada.....	Sept. 28, 1917
Miranda, Ramón, 11 Broadway, New York City.....	New York.....	Mar. 19, 1916
Montcastle, G. B., P. O. box 927, Richmond.....	Virginia.....	Dec. 8, 1917
Spaulding, Willis M., 509 Brisbane Building, Buffalo.	New York.....	June 20, 1916
Wurts, John S., 1124 Land Title Building, Philadelphia	Pennsylvania.....	July 2, 1914

STATEMENT 2.—*Domestic corporations registered in the office of the executive secretary during the fiscal year 1917-18.*

Name.	Location of principal place of business.	Principal purposes.	Total authorized capital stock.	Paid in capital with which the corporation shall commence business.
Banco de San Germán.....	San Germán.....	Banking.....	\$100,000	\$28,500
J. Padró & Brother Co. (Inc.).....	San Juan.....	Mercantile.....	25,000	1,000
The Regional Printing Co.....	do.....	Printing.....	10,000	1,000
Albion Electric Co.....	Albion.....	Generation of electric power.....	20,000	2,000
San Juan-Santurce Line (Inc.).....	San Juan.....	Automobile transportation.....	42,500	1,000
Puerto Rico Ilustrado (Inc.).....	do.....	Printing.....	100,000	2,000
Occidental Medicine Co.....	Arecibo.....	Druggists' business.....	10,000	2,000
American Products Sales Agency.	San Juan.....	Mercantile.....	25,000	6,000
San Juan Sanitary Steam Laundry (Inc.).....	do.....	Laundry business.....	19,000	8,000
Nicolás Hernández Co.....	do.....	Mercantile.....	20,000	2,000
The Tropical Industrial Co.....	do.....	Manufacture and bottling of nonalcoholic beverages.	25,000	2,500
South Porto Rico Sugar Co.....	Ensenada.....	Sugar.....	300,000	3,000
Knickerbocker Fruit Co.....	San Juan.....	Fruit.....	10,000	1,000
West Porto Rico Sugar Co. (Inc.).....	do.....	Sugar.....	15,000,000	1,000
Compañía de Construcciones Populares por Ahorro, Ciudad del Sol, Sistema Roveda (Inc.).....	do.....	Building.....	100,000	1,200
Corporación Depositaria de Azúcares de Puerto Rico.....	do.....	Sugar warehousing.....	50,000	1,000
Standard Grocery Co.....	do.....	Groceries.....	35,000	15,000
The Porto Rican-American Preserving Co. (Inc.).....	do.....	Fruit preserving.....	25,000	1,000
Porto Rico Coconut Oil Mill Co. (Inc.).....	do.....	Coconut oil and other coconut products.....	500,000	1,000
Wm. M. Garie & Co. (Inc.).....	do.....	Mercantile.....	25,000	1,000
Compañía de Ferrocarriles del Norte de Puerto Rico (northern Porto Rico R. R. Co.).....	do.....	Railroads.....	500,000	2,400
Las Casas Improvement Co.....	do.....	Building.....	18,000	3,000
La Isabela Grove Co.....	do.....	Agriculture.....	200,000	1,000
Mundial Film Co. (Inc.).....	do.....	Moving pictures.....	10,000	5,000
Lee & O'Neill (Inc.).....	do.....	Mercantile.....	50,000	1,500
Garage Lareño (Inc.).....	Lares.....	Automobiles and transportation.....	50,000	3,000
Aguadilla Lighter, Storage & Transportation Co.....	Aguadilla.....	Lighterage, storage, and transportation.....	100,000	2,000
Monte-Flores Industrial Corporation.....	Ponce.....	Amusements and sale of refreshments, perfumes, etc.	50,000	5,500
Cantero Fernández & Co. (Inc.).....	San Juan.....	Printing.....	250,000	8,000
The Guaynabo Molasses Co. (Inc.).....	do.....	Molasses, sugar sirups, and sugar.....	30,000	7,000
The P. L. Cormier Co.....	do.....	Mercantile.....	25,000	6,000
Porto Rico Steam Laundry Co.....	do.....	Laundry business.....	150,000	1,000
Total.....			17,874,500	116,800

STATEMENT 3.—*Domestic corporations dissolved during the fiscal year 1917-18.*

Name.	Principal place of business.
The Redemptorist Fathers of Porto Rico.....	Mayaguez.
The Humacao Fruit Co.....	San Juan.
The Porto Rico Investment Co.....	Do.
Arecibo Ice & Soda Water Co.....	Arecibo.
New York & Porto Rico Express Co.....	San Juan.
The Mayaguez Fruit Packing Co.....	Mayaguez.
The Porto Rico Publishing & Printing Co.....	San Juan.

STATEMENT 4.—*Foreign corporations registered in the office of the executive secretary during the fiscal year 1917-18.*

Name.	Location	Agent.	Address.	Principal purposes.	Total authorized capital stock.	Paid-in capital.
The Sugar Sales Corporation.	New York, N. Y.	H. Glyde Gregory.	San Juan.	Sugar.....	\$100,000	\$100,000
The Cornucopia Mining Co.	Wilmington, Del.	José R. F. Savage.	do.....	Mining.....	200,000	26,000
Hamilton & Chambers Co. (Inc.).	New York, N. Y.	Nelson T. Stacy.	Cayey.....	Constructing.	100,000	100,000
Purdy & Henderson Co.	Jersey City, N. J.	Charles Hartzell.	San Juan.	do.....	350,000	250,000
Unión Hispano Americana de Seguros.	Habana, Cuba.	Edward Ferrer	do.....	Insurance.....	2,000,000	2,000,000
The National City Bank of New York.	New York, N. Y.	Burt O. Clark.	do.....	Banking.....	25,000,000	25,000,000
Corbin-Griffith Fruit Co. (Inc.).	Friendship, N. Y.	G. Adin Corbin.	Vega Baja.	Fruit.....	23,000	22,000
Total.....					27,773,000	27,498,000

STATEMENT 5.—*Foreign corporations that ceased to do business in Porto Rico during the fiscal year 1917-18.*

Name.	State where organized.	Principal place of business in Porto Rico.
Magdeburg Fire Insurance Co. <sup>1</sup> .....	Germany.....	San Juan.
Prussian National Insurance Co. <sup>1</sup> .....	do.....	Do.
Guanica Centrale.....	New Jersey.....	Ponce.
Nord-Deutsche Insurance Co. <sup>1</sup> .....	Germany.....	San Juan.
Mannheim Insurance Co. <sup>1</sup> .....	do.....	Do.
Aachen & Munich Fire Insurance Co. <sup>1</sup> .....	do.....	Do.
Hamburg-Bremen Fire Insurance Co. <sup>1</sup> .....	do.....	Do.
Industrial Co. of Porto Rico.....	New Jersey.....	Do.
Sucrerie Centrale Coloso de Porto Rico.....	France.....	Aguadilla.
The Encenada Estates (Inc.).....	Connecticut.....	Ponce.
Johnson Development Co.....	New York.....	Caguas.
Fiske Bros. Refining Co.....	do.....	San Juan.
Central Fortuna (Inc.).....	Connecticut.....	Ponce.
The Paul Taylor Brown Co.....	New York.....	Mayaguez.
The Porto Rico Motor Co.....	Connecticut.....	San Juan.
The West Indies Mining Co.....	Delaware.....	Do.

<sup>1</sup> German insurance corporations ceasing to do business for duration of war under presidential order of July 13, 1917.

STATEMENT 6.—*List of domestic corporations existing and doing business on June 30, 1918.*

Name.	Location.	Principa. purposes.
Banco Popular de San Juan.....	San Juan.....	Banking.
Banco Territorial y Agrícola de Puerto Rico.....	do.....	Do.
Caja de Economías y Préstamos de San Germán.....	San Germán.....	Do.
Credito y Ahorro Ponceño.....	Ponce.....	Do.
The Bonnie Fruit Co.....	San Juan.....	Fruits.
The American Grocery & Ship Supply Co.....	do.....	General merchandise.
Ponce Agricultural & Industrial Co.....	Ponce.....	Agricultural products.
The Prudential Central Co.....	Patillas.....	Sugar.
The Enriqueta Land Co.....	do.....	Real estate development.
Central Cambalache.....	Arecibo.....	Sugar.
The Juncoos Central Co.....	San Juan.....	Do.
The Fajardo Fruit Co.....	do.....	Fruits.
The Caribbean Fruit Co.....	do.....	Do.
The Yabucoa Sugar Co.....	do.....	Sugar.
Porto Rico Pineapple Co.....	do.....	Pineapples, etc.
Alta Vista Fruit Co.....	do.....	Fruits.
The Mabilla Mining Co.....	do.....	Mining.
Arecibo Orange & Pineapple Co.....	do.....	Fruits.
The Mayaguez Fruit Cultivating Co. of Porto Rico.....	Rio Piedras.....	Do.
Enterprise Fruit Co.....	San Juan.....	Do.
The Salto Grande Co.....	do.....	Mining, etc.
The Insular Dock Co.....	do.....	Docks and wharves.
Placena Sugar Co.....	do.....	Sugar.
Sabana Seca Plantation.....	do.....	Agricultural products.
Miramar Apartment House Co.....	do.....	Apartment houses.
Concepción Mining Co.....	do.....	Mining.
Central Eureka (Inc.).....	Mayaguez.....	Sugar.
The Ponce Lighter Co.....	Playa de Ponce.....	Lighterage, etc.
Carro Gordo Fruit Co.....	San Juan.....	Fruits.
The Mesilla Fruit Co.....	do.....	Do.
Loiza Sugar Co.....	do.....	Sugar.
Sea Island Grape Fruit Co.....	do.....	Grapefruit, etc.
Compañía Tabacalera de Puerto Rico.....	do.....	Growing and manufacturing tobacco.
Mayaguez Sugar Co.....	Mayaguez.....	Sugar.
The McMurtrie-Guiler Co.....	San Juan.....	Machinery.
Consejo Construction Co.....	do.....	Construction work.
Gillies & Woodward.....	do.....	Cigars, tobacco, etc.
Santa Isabel Sugar Co.....	Santa Isabel.....	Sugar.
Nathaniel A. Walcott (Inc.).....	San Juan.....	Agricultural products.
Sociedad Industrial la Enskalduna.....	do.....	Foodstuffs.
Compañía Salinera de Cabo Rojo.....	do.....	Salt.
The Mayaguez Light & Ice Co.....	Mayaguez.....	Electric power and ice.
Arkadia Sugar Co.....	San Juan.....	Sugar.
Boller Sugar Co.....	Lares.....	Do.
Benítez Sugar Co.....	Vieques.....	Do.
Compañía Azucarera El Ejemplo.....	Humacao.....	Do.
Cayey Sugar Co.....	San Juan.....	Do.
Scoville & Co. (Inc.).....	do.....	Agricultural products.
Hacienda Semil (Inc.).....	Juana Díaz.....	Do.
The A. A. David (Ltd.).....	Cataño.....	Transportation, warehousing, etc.
The Porto Rico Fruit Exchange.....	San Juan.....	Fruits.
S. Ramirez & Co.....	do.....	Commission merchants.
The Porto Rico Drug Co.....	Ponce.....	Drugs.
Pallejas Sugar & Coffee Co.....	do.....	Sugar and coffee.
Mayaguez Dock & Shipping Co.....	Mayaguez.....	General shipping.
Camuy Sugar Co.....	Camuy.....	Sugar.
Central Vanmina.....	San Juan.....	Do.
Central Alianza.....	Arecibo.....	Do.
Utusado Sugar Co.....	Utusado.....	Do.
The Imperial Fruit Co.....	Bayamon.....	Fruits.
The Times Publishing Co.....	San Juan.....	Newspaper and general publishing.
Porto Rico Brewing Co.....	do.....	Brewing and distilling.
Porto Rico Progress Publishing Co.....	do.....	Publishers.
Sociedad Industrial La Unión.....	do.....	Foodstuffs.
Asociación Constructora del Edificio Casino de Puerto Rico.....	do.....	Construction and lease of building for Casino of Porto Rico.
Plata Sugar Co.....	do.....	Sugar.
The Woodsum Fruit Co.....	Arecibo.....	Fruits.
Compañía Curtidora de Puerto Rico.....	San Juan.....	Leather.
Ponce Mineral Water Co.....	Ponce.....	Aerated water, etc.
Casino de Puerto Rico.....	San Juan.....	Club.
Porto Rico Distilling Co.....	Arecibo.....	Distilling.
Porto Rico Railway, Light & Power Co.....	San Juan.....	Electric light and transportation.
Porto Rico Construction Co.....	do.....	General construction.
Compañía Azucarera del Toa.....	do.....	Sugar.
Atlas Line.....	do.....	Automobile transportation.
Campo Alegre Fruit Co.....	do.....	Fruits.
Bayamón Fruit Growers' Association of Porto Rico.....	Toa Baja.....	Do.
Carmen Central.....	San Juan.....	Sugar.
Compañía Azucarera de la Carolina.....	do.....	Do.



STATEMENT 6.—List of domestic corporations existing and doing business on June 30, 1918—Continued.

Name.	Location.	Principal purposes.
Javuya Development Co.....	Ponce.....	Sugar and coffee.
Finlay, Waymouth & Lee (Inc.).....	San Juan.....	General merchants.
Sociedad Artistico Teatral.....	do.....	Theatrical organizations.
Vannina Distilling Co.....	do.....	Distilling.
The Mayaguez Drug Co.....	Mayaguez.....	Drugs.
The Porto Rico Mines Co.....	San Juan.....	Mining.
Central Juanita (Inc.).....	Bayamon.....	Sugar.
The Parkhurst Fruit Co.....	do.....	Fruit.
Jovero Land Co.....	Ponce.....	Agricultural products.
The Prescott & Mehrhof Co.....	Salinas.....	Agriculture and cattle.
The Ponce Auto Transportation Co.....	Ponce.....	Automobiles and auto transportation.
Compania Electrica Industrial (Inc.).....	San German.....	Light and power.
Insular Clear Co.....	Caguas.....	Tobacco.
Gonzalez Padin Co. (Inc.).....	San Juan.....	General merchandise.
Suburban Improvement Co.....	do.....	Building construction.
The Combination Co.....	Rio Piedras.....	Transportation.
La Plata Tobacco Co.....	Caguas.....	Tobacco.
Garage Mayaguez (Inc.).....	Mayaguez.....	Transportation.
Mayaguez Tramway Co.....	do.....	Electric light, power, and transportation.
Porto Rico Transportation Co.....	San Juan.....	Automobile transportation.
Compania de Transporte de Maricao.....	Maricao.....	do.
Banco Comercial de Puerto Rico.....	San Juan.....	Banking.
The Porto Rico Pharmaceutical Specialty Co.....	Anasco.....	Chemical and pharmaceutical preparation.
The Porto Rico Coconut Fiber Co.....	San Juan.....	Fiber products.
C. O. Lord & Co.....	do.....	Machinery, hardware, etc.
Bayamon Fruit Co.....	Toa Baja.....	Fruit growing.
Insular Fruit Co.....	Arecibo.....	do.
Ana Maria Sugar Co. (Inc.).....	Mayaguez.....	Sugar.
Rico Tropical Fruit Co.....	Arecibo.....	Fruit Growing.
Aboy Vidal y Compania (Inc.).....	San Juan.....	Lumber.
La Compania de Fuerza Hidroelectrica de Ponce.....	Ponce.....	Electric power.
Porto Rico Fertilizer Co.....	San Juan.....	Fertilizer.
Miramar Shop Co.....	do.....	Automobile transportation, repair, etc.
The Atlas Commercial Co.....	do.....	Automobile transport.
New Corsica Centrale Corporation.....	do.....	Sugar.
The Mansfield Plantations.....	Arecibo.....	Fruit growing.
Compania de Luz y Fuerza Electrica de Lares.....	Lares.....	Electric plant.
Caribbean Canning Co.....	Mayaguez.....	Manufacture of fruit products.
Julio Godreau Co.....	Salinas.....	Agricultural.
Comerio Tobacco Co.....	Comerio.....	Tobacco.
Asociacion Mercantil de Puerto Rico y Agencia Protectora de Creditos.....	San Juan.....	To furnish confidential information, to act as collectors, etc.
La Correspondencia de Puerto Rico.....	do.....	Printing.
The Newton Fruit Co.....	do.....	Mercantile and fruit.
Central Pasto Viejo (Inc.).....	do.....	Sugar.
Sociedad Cooperativa de Premios (Inc.).....	do.....	To buy and sell trading stamps.
The Arecibo Press Co.....	Arecibo.....	Printing.
Seboruco Grove.....	Santurce.....	Agricultural and mercantile.
Cayey Light & Ice Co.....	Cayey.....	Electric light and ice.
The Insular Motor Co.....	San Juan.....	Automobiles and transportation.
Porto Rico Ice Co.....	do.....	Ice.
San Juan Racing & Sporting Club.....	do.....	Horse racing.
A. Escudero & Co. (Inc.).....	do.....	Mercantile.
La Buenaventura Fruit Corporation.....	do.....	Fruit.
Santurce Abattoir (Inc.).....	do.....	Slaughterhouses and live stock.
The National Coconut & Fiber Co.....	do.....	Coconut products.
Cash Sales Co.....	Aguadilla.....	Importers and exporters.
The Porto Rico Merchandise Stamp Co.....	San Juan.....	Trading stamps.
Garzot y Fuertes.....	Naguabo.....	Sugar.
Compania Tabacalera del Comercio.....	San Juan.....	Tobacco.
Central Bayaney.....	Arecibo.....	Sugar.
Lee Videt & Bolivar (Inc.).....	San Juan.....	Carpenter's shop and cabinet makers.
Porto Rico Central Sugar estates.....	do.....	Sugar.
Specialty Shop for automobiles.....	do.....	Automobiles and transportation.
Perfumeria Barnes.....	Ponce.....	Manufacture of alcohol, perfumes, and drugs.
La Democracia (Inc.).....	San Juan.....	Printing and stationery.
Tropical Film Co.....	do.....	Motion pictures.
Revista Deportiva.....	do.....	Printing and bookbinding.
Sachs, Barletta & Bas (Inc.).....	do.....	Mercantile.
Corporacion Azucarera Sauri & Subira.....	Ponce.....	Sugar.
Espinosa Villa Grove Corporation.....	Dorado.....	Fruit.
Linea Ferrea del Oeste (Inc.).....	San Juan.....	Transportation.
Banco de Ponce.....	Ponce.....	Banking.
The Insular Mercantile Agency (Inc.).....	San Juan.....	To furnish confidential information, to act as collectors, etc.
Carlos Cid y Compania (Inc.).....	do.....	Mercantile.
West Indies Coco-Fiber Co.....	do.....	Coconut products.
Porto Rico Fruit Union.....	do.....	Fruit.

STATEMENT 6.—*List of domestic corporations existing and doing business on June 30, 1918—Continued.*

Name.	Location.	Principal purposes.
Central Belvedere.....	Cabo Rojo.....	Sugar.
Stubbs Brothers (Inc.).....	San Juan.....	Mercantile.
Fritze, Lundt & Co., Successors (Inc.).....	do.....	Do.
Korber & Co. (Inc.).....	do.....	Do.
Estate of Wilhelm Korber (Inc.).....	do.....	Do.
Banco de San German.....	San German.....	Banking.
J. Padro and Brother Co. (Inc.).....	Sap Juan.....	Mercantile.
Regional Printing Co. The.....	do.....	Printing.
Aibonito Electric Company.....	Aibonito.....	Generation of electric power.
San Juan-Santurce Line (Inc.).....	San Juan.....	Automobile transportation.
Puerto Rico Ilustrado (Inc.).....	do.....	Printing.
Occidental Medicine Company.....	Arecibo.....	Druggists' business.
American Products Sales Agency.....	San Juan.....	Mercantile.
San Juan Sanitary Steam Laundry (Inc.).....	do.....	Laundry business.
Nicolas Hernandez Co.....	do.....	Mercantile.
The Tropical Industrial Co.....	do.....	Manufacture and bottling of nonalcoholic beverages.
South Porto Rico Sugar Co.....	Ensenada.....	Sugar.
Kniekerbocker Fruit Co.....	San Juan.....	Fruit.
West Porto Rico Sugar Company (Inc.).....	do.....	Sugar.
Compania de Construcciones Populares por Ahorro, Ciudad del Sol, Sistema Roveda (Inc.).....	do.....	Building.
Standard Grocery Co.....	do.....	Groceries.
The Porto Rican-American Preserving Co. (Inc.).....	do.....	Fruit preserving.
Porto Rico Coconut Oil Mill Co. (Inc.).....	do.....	Coconut oil and other cocoanut products.
Wm. M. Garie & Co. (Inc.).....	do.....	Mercantile.
Compania de Ferrocarriles del Norte de Puerto Rico (Northern Porto Rico R. R. Co.).....	do.....	Railroads.
Las Casas Improvement Co.....	do.....	Building.
La Isabela Grove Co.....	do.....	Agriculture.
Mundial Film Co. (Inc.).....	do.....	Moving pictures.
Lee & O'Neill (Inc.).....	do.....	Mercantile.
Garage Lareno, Incorporated.....	Lares.....	Automobiles and transportation.
Aguadilla Lighter, Storage & Transportation Co.....	Aguadilla.....	Lighter, storage, and transportation.
Monte-Flores Industrial Corporation.....	Ponce.....	Amusements and sale of refreshments, perfumes, etc.
Cantero Fernandez & Co. (Inc.).....	San Juan.....	Printing.
The Guaynabo Molasses Co. (Inc.).....	do.....	Molasses, sugar sirups and sugar.
The P. L. Cormier Co.....	do.....	Mercantile.
Porto Rico Steam Laundry Co.....	do.....	Laundry business.
Corporacion Depositaria de Azucars de Puerto Rico.....	do.....	Sugar warehousing.
Fruit Growers' Association of Porto Rico. (Inc.).....	do.....	Marketing and selling fruits.
Panzardi, Mayoral & Co. (Inc.).....	Ponce.....	Automobile transportation.
Sociedad Progreso y Economia.....	Yabucoa.....	Merchandise and provisions.

STATEMENT No. 7.—*List of corporations organized outside of Porto Rico that, according to the records of the office of the executive secretary of Porto Rico, were in existence on June 30, 1918.*

Name.	Place where organized.	Principal purposes.	Name of the agent in Porto Rico.	Address of the agent.
British & Foreign Marine Insurance Co. (Ltd.)	England.....	Insurance.....	Villar & Co., successors.	San Juan.
New York Life Insurance Co.	New York.....	do.....	Antonio Sarmiento..	Do.
North British & Mercantile Insurance Co.	England.....	do.....	Fritze, Lundt & Co. (Inc.)	Do.
Northern Assurance Co. (Ltd.)	Scotland.....	do.....	Moral & Co.....	Mayaguez.
Norwich Union Fire Insurance Society (Ltd.)	England.....	do.....	J. Ochoa y Hermano.	San Juan.
Royal Insurance Co. (Ltd.)	do.....	do.....	do.....	Do.
Swift & Co.	Illinois.....	Foodstuffs and provisions.	Sobrinos de Ezquiaga	Do.
American Colonial Bank of Porto Rico	New York.....	Banking.....	Wm. Walsh.....	Do.
New York & Porto Rico Steamship Co.	do.....	Transportation.	H. L. Cochran.....	Do.
Manufacturers' Life Insurance Co.	Canada.....	Insurance.....	R. A. Nadal.....	Do.
Porto Rican-American Tobacco Co.	New Jersey....	Growing and manufacturing tobacco.	Eliseo Font, Jr.....	Do.
			John Frese.....	Do.

STATEMENT NO. 7.—*List of corporations organized outside of Porto Rico that, according to the records of the office of the executive secretary of Porto Rico, were in existence on June 30, 1918—Continued.*

Name.	Place where organized.	Principal purposes.	Name of the agent in Porto Rico.	Address of the agent.
San Juan Ice & Refrigerating Co.	New Jersey...	Manufacturing ice...	H. N. Clarity.....	San Juan.
Sun Life Assurance Co., of Canada.	Canada.....	Insurance.....	Jesús M. Lago.....	Do.
Palatine Insurance Co. (Ltd.)	England.....	do.....	P. Gandía Córdova..	Do.
Commercial Union Assurance Co. (Ltd.)	do.....	do.....	Finlay, Waymouth & Lee (Inc.)	Do.
Porto Rico Fruit Co.	New York....	Fruits.....	Arthur B. Mitchell..	Bayamon.
Compañía de los Ferrocarriles de Puerto Rico.	Spain.....	Transportation...	E. Acuña Aybar.....	San Juan.
Ponce Ry. & Light Co.	New Jersey...	Electric light and transportation.	Gerard A. de Haseth.	Ponce.
Fidelity & Deposit Co. of Maryland.	Maryland....	Surety bonds.....	Herman L. Cochran..	San Juan.
American Railroad Co. of Porto Rico.	New York....	Transportation...	G. Villard.....	Do.
West India Oil Co.	New Jersey...	Oil.....	C. H. Wanzer.....	Do.
Guardian Assurance Co. (Ltd.)	England.....	Insurance.....	Villar & Co.....	Do.
Porto Rican Leaf Tobacco Co.	New Jersey...	Growing and manufacturing tobacco.	John Freese.....	Do.
Singer Sewing Machine Co.	do.....	Sewing machines...	José Alvarez.....	Do.
Central Los Caños...	New York....	Sugar.....	R. B. Childs.....	Arecibo.
Liverpool & London & Globe Insurance Co.	England.....	Insurance.....	P. Gandía & Co.....	San Juan.
British-America Assurance Co.	Canada.....	do.....	Fritze, Lundt & Co., successors (Inc.)	Do.
The Union Central Life Insurance Co.	Ohio.....	do.....	José C. Barbosa.....	Do.
The Candelaria Fruit Co.	Maine.....	Fruits.....	N. A. Walcott.....	Do.
The Puerto Rico Planters' Co.	do.....	Agricultural products.	W. Francis Grant...	Vega Baja.
American Surety Co. of New York.	New York....	Surety bonds.....	Burt O. Clark.....	San Juan.
Waldrop Photographic Co.	Tennessee...	Photographic supplies, etc.	N. P. Nichols.....	Do.
Espinosa Fruit Co.	Massachusetts.	Fruits.....	C. B. Emerson.....	Catano.
Cayey Caguas Tobacco Co.	New York....	Growing and manufacturing tobacco.	Harrison Johnson...	Caguas.
Ponce & Guayama R. R. Co.	New Jersey...	Transportation...	C. L. Carpenter.....	Aguirre.
Vega Baja Fruit & Land Co.	New York....	Agricultural products.	Carl F. Juengling...	Vega Baja.
Mona Island Phosphate Co.	Louisiana...	Mining, etc.....	Marc Lejeune.....	Mayaguez.
The Fajardo Sugar Co.	New York....	Sugar.....	J. Bird Arias.....	Fajardo.
The Fajardo Development Co.	Connecticut...	do.....	do.....	Do.
Porto Rico Orange & Cotton Co.	New York....	Agricultural products.	E. A. Gildemester...	Bayamon.
Porto Rico Canning Co.	do.....	Canning pineapples, etc.	Ben. J. Horton.....	Mayaguez.
Herkimer-Porto Rico Land & Fruit Co.	do.....	Agricultural products.	Mrs. Charles P. Avery.	Guainabo.
Centra. Aguirre Co.	Maine.....	Sugar.....	C. L. Carpenter.....	Aguirre.
The Western Assurance Co.	Canada.....	Insurance.....	Sobrimos de Esquiaga.	San Juan.
Porto Rico Grove & Garden Co.	New York....	Agricultural products.	F. N. Reed.....	Pueblo Viejo.
Buffalo & Porto Rican Fruit Co.	do.....	Fruits.....	Geo. K. Knight.....	Barceloneta.
The West Indies Cigar Co.	do.....	Cigars, etc.....	Manuel Bao.....	Utuaño.
Societe Anonyme des Sucreries de St. Jean.	Belgium.....	Sugar.....	Prudent Wittemans.	Caguas.
San Antonio Docking Co.	New York....	Docks, wharves, etc.	R. A. Nadal.....	San Juan.
Porto Rican Express Co.	do.....	Express service...	Wm. J. Salvá.....	Do.
United States Colonial Fruit Co.	do.....	Fruits.....	E. A. Bailey.....	Manatí.
Bernal Estate	New Jersey...	Land development.	F. Manuel Toro.....	Ponce.
San Antonio Co.	Maine.....	Docks and wharves.	R. A. Nadal.....	San Juan.
The Barceloneta Fruit Co.	New York....	Fruits.....	E. M. Ferringer.....	Barceloneta.
Tropic al Fruit Growers' Association.	New Jersey...	do.....	Linn Bartholomew...	Garrochales.
The Royal Bank of Canada.	Canada.....	Banking.....	Richard J. Allen...	San Juan.
Pavenstedt Land Co.	New York....	Land development.	Raymond B. Childs.	Arecibo.
National Surety Co.	do.....	Surety bonds, etc.	Harry F. Besosa...	San Juan.
Hatillo Fruit Co.	Pennsylvania.	Fruits.....	Walter C. Dreier...	Rio Piedras.
The Gregg Co. (Ltd.)	New York....	Machinery.....	Rafael Carrión...	San Juan.
Employers' Liability Assurance Corporation (Ltd.)	Great Britain.	Insurance.....	Charles Hartzell...	Do.

STATEMENT NO. 7.—*List of corporations organized outside of Porto Rico that, according to the records of the office of the executive secretary of Porto Rico, were in existence on June 30, 1918—Continued.*

Name.	Place where organized.	Principal purposes.	Name of the agent in Porto Rico.	Address of the agent.
The Standard Fruit Co. of Porto Rico.	New York.....	Fruits.....	Michael Davis.....	Vega Baja.
Baloise Fire Insurance Co..	Switzerland...	Insurance.....	Fritze, Lundt & Co. successors (Inc.)	San Juan.
American Cigar Co.....	New Jersey.....	Cigars, etc.....	A. Staebler.....	Do.
Plaza Provision Co.....	New York.....	General merchandise	Frederick C. Holmes.	Do.
Empire Pineapple Co.....	do.....	Pineapples.....	Russell Stinard.....	Bayamon.
The Filbrick Fruit Co. of Porto Rico.	do.....	do.....	Chas. F. Filbrick, jr.	Do.
The Superior Fruit Co. of Porto Rico.	do.....	Fruits.....	C. F. Juengling.....	Vega Baja.
Captain Marquis Porto Rico Land Co.	Pennsylvania.	Real estate.....	E. M. Ferringer.....	Barceloneta.
The Columbo Tropical Fruit Co.	New York.....	Fruits.....	C. F. Juengling.....	Vega Baja.
L'Union Compagnie d'Assurance contre l'Incendie.	France.....	Insurance.....	Charles Vere.....	San Juan.
Second Oneida Fruit Co..	New York.....	Fruits.....	Wm. A. Griffith.....	Manati.
The Oneida Fruit Co.	do.....	do.....	do.....	Do.
Armour & Co.....	New Jersey.....	Foodstuffs and provisions.	H. M. Porter.....	San Juan.
The Laguna Fruit Co. of Porto Rico.	New York.....	Fruits.....	G. O. Spaulding.....	Rio Piedras.
Fortune Estates.....	do.....	Land development.	F. Manuel Toro.....	Ponce.
Fitzpatrick Wemar Fruit & Land Co. of Porto Rico.	Louisiana.....	do.....	John J. Fitzpatrick.	Bayamon.
Porto Rico Mercantile Co.	West Virginia.	Molasses.....	A. Raushenplat.....	San Juan.
Montreal Trust Co.....	Canada.....	Banking.....	R. G. Allen.....	Do.
Plaza Fruit Co.....	Illinois.....	Fruits.....	Geo. L. Elkins.....	Do.
Hope Fruit Co.....	Rhode Island.	do.....	Beriah A. Wall.....	Do.
The Bayview Fruit Co. of Porto Rico.	New York.....	do.....	H. J. Davison.....	Bayamon.
The Graham & Granger Fruit Co.	New Jersey.....	do.....	Robert Graham.....	Do.
Pamelo Fruit Co.....	New York.....	do.....	A. G. Stanwood.....	Do.
El Prospero Fruit Co. of Porto Rico.	do.....	do.....	F. B. McLaughlin.....	Manati.
South Atlantic Fruit Co..	do.....	do.....	G. O. Spaulding.....	Rio Piedras.
Phoenix Assurance Co. (Ltd.)	Great Britain.	Insurance.....	Finlay, Wymouth & Lee (Inc.).	San Juan.
Reading Iron Co.....	Pennsylvania.	Iron and steel manufactures.	A. Raushenplat.....	Do.
Tos Alto Citrus Fruit Co..	New York.....	Fruits.....	Maurice Labeur.....	Bayamon.
Bank of Nova Scotia.....	Canada.....	Banking.....	Alexander McHardy.	San Juan.
Morovis Plantation.....	New York.....	Agricultural products.	John McLaughlin.....	Vega Baja.
Atlas Assurance Co. (Ltd.)	England.....	Insurance.....	Sanchez Morales & Co.	San Juan.
Suburban Fruit Co.....	New York.....	Fruits.....	G. O. Spaulding.....	Rio Piedras.
The Royal Exchange Assurance.	Great Britain.	Insurance.....	J. Ochoa y Hno.....	San Juan.
The Fajardo Sugar Growers' Association.	New York.....	Sugar.....	J. Bird Arias.....	Fajardo.
The Yorkshire Insurance Co. (Ltd.)	Great Britain.	Insurance.....	Successors de Frontera S. en C.	Mayaguez.
Dibert, Bancroft & Ross Co. (Ltd.)	Louisiana.....	Machinery.....	Fritze, Lundt & Co. Successor. (Inc.)	San Juan.
The Texas Co.....	Texas.....	Oil.....	Frank Lopez.....	Do.
San Juan Fruit Co.....	New York.....	Fruits.....	E. A. Gildemeister.	Pueblo Viejo.
The Sherman Porto Rican Fruit Co.	do.....	do.....	A. C. Imbery.....	Barceloneta.
La Aldea Fruit Co.....	do.....	do.....	F. B. McLaughlin.....	Manati.
Bine and Gold Orchards.	Maine.....	do.....	Laurence W. Davis.	Vega Alta.
Atlas Transfer Co.....	do.....	Automobile transportation.	Delfin Mufios.....	San Juan.
The Palo Seco Fruit Co.	Massachusetts.	Fruits.....	B. E. Stevenson.....	Do.
The F. J. Carlin Construction Co.	New York.....	General construction.	D. P. Oaksmith.....	Do.
The Porto Rico Citrus Fruit Co.	do.....	Fruits.....	John M. Kohn.....	Bayamon.
Arecibo Grape Fruit Co.	do.....	do.....	G. W. Middleton.....	Manati.
Island Fruit Co.....	do.....	do.....	G. C. Swanson.....	Barceloneta.
The Star Fruit Co. of Porto Rico.	do.....	do.....	G. O. Spaulding.....	Rio Piedras.
Porto Rico Gas Co.....	Delaware.....	Manufacture and sale of gas.	George H. Joy.....	San Juan.
The Southern Cross Fruit Co. (Inc.)	New York.....	Fruits.....	R. L. Mills.....	Monacillo, Rio Piedras.

STATEMENT NO. 7.—*List of corporations organized outside of Porto Rico, that, according to the records of the office of the executive secretary of Porto Rico, were in existence on June 30, 1918—Continued.*

Name.	Place where organized.	Principal purposes.	Name of the agent in Porto Rico.	Address of the agent.
The Royal Fruit Co. of Porto Rico (Inc.).	New York....	Fruits.....	E. A. Guildemeister.	Bayamon.
Compagnie Française des Câbles Télégraphiques.	France.....	Submarine cables...	Hernand Behn.....	San Juan.
Boston Molasses Co.	New Jersey...	Dealers in molasses..	Pedro Salazar.....	Do.
Spanish American Fruit Co.	.....do.....	Fruits.....	A. W. Houck.....	Vega Baja.
Vega Valley Orchards (Inc.).	Rhode Island....	.....do.....	Laurence W. Davis.	Vega Alta.
Rojas, Niese & Co. (Inc.).	New York....	Merchandise, export and import.	Bas & Co., S. en C.	San Juan.
The B. F. Goodrich Rubber Co.	Michigan.....	Dealers in rubber goods.	Julián C. Elizondo..	Do.
Porto Rico Coal Co. (Inc.).	New York....	Dealers in coal, etc.	Edward Ferrer.....	Do.
City of Ponce Gas Co.	Delaware.....	Gas Works.....	F. Manuel Toro.....	Ponce.
Armour Fertilizer Works.	West Virginia..	Fertilizer.....	H. M. Porter.....	San Juan.
Porto Rico Telephone Co.	Delaware.....	Telephone.....	Edward Ferrer.....	Do.
Utica Plantations (Inc.).	New York....	Fruits, vegetables, etc.	Walter H. Morton...	Bayamon.
Bull Insular Line (Inc.).	Maine.....	Carriage of freight and passengers.	Miguel Such.....	San Juan.
The Royal Fruit Co. of Utica, N. Y.	New York....	Fruits.....	Arthur B. Mitchell..	Bayamon.
Rosenstadt & Waller (Inc.).	.....do.....	Tobacco.....	Antonio C. Rodríguez.	Caguas.
George P. Plant Milling Co.	Missouri.....	Sale of wheat flour.	M. Gómez & Co.....	San Juan.
Minute Tapioca Co.....	Massachusetts..	Sale of tapioca and gelatin.	Tom B. Matthews...	Bayamon.
The National Cash Register Co.	Ohio.....	Sale of cash registers.	J. J. Lay.....	San Juan.
Hartford Fire Insurance Co.	Connecticut....	Insurance.....	Fritze, Lundt & Co. Successor. (Inc.).	Do.
Atlas Grape Fruit Co.....	Delaware.....	Fruits.....	Hebert W. Brown...	Bayamon.
La Isabella Grove (Inc.).	New York....	Agricultural products.	Charles Hartzell....	San Juan.
Sunnyland Fruit Co. (Inc.).	.....do.....	Fruits.....	A. Menist.....	Aguadilla.
Parker, Webb & Co.....	Michigan.....	Meats and meat products.	Manuel Gómez López.	San Juan.
Sugar Products Co.....	New York....	Sugar products.....	Sobrinos de Ezquiaga.	Do.
Medal Film Co. (Inc.).	.....do.....	Moving picture films.	Carlos Zeno.....	Do.
Universal Film Manufacturing Co..	.....do.....	.....do.....	Arthur L. Pratchett.	Do.
Nitrate Agencies Co.....	West Virginia..	Import and export.	A. C. Diehl.....	Do.
Melchior, Armstrong & Dessau (Inc.)	New York....	Mercantile.....	P. Juan Armstrong.	Ponce.
Buena Vista Industrial Co.	Delaware.....	Agricultural and mercantile.	Edward A. Thayer...	Vega Baja.
The Behn Brothers (Inc.).	Connecticut....	Mercantile.....	Hernand Behn.....	San Juan.
Elbrey Chemical Works...	New York....	Drugs and chemicals.	Francisco I. Carreras.	Humacao.
St. Paul Fire & Marine Insurance Co.	Minnesota.....	Insurance.....	Korber & Co. (Inc.).	San Juan.
South Porto Rico Sugar Co.	New Jersey...	Sugar.....	F. Manuel Toro.....	Ponce.
The Porto Rico Hotels Corporation.	Delaware.....	Hotels.....	Edward Ferrer.....	San Juan.
Mono Island Guano Co. (Inc.).	New York....	Fertilizers.....	Marc Lejeune.....	Mayaguez.
The Home Insurance Co...	.....do.....	Insurance.....	Korber & Co. (Inc.).	San Juan.
The Sugar Sales Corporation.	.....do.....	Sugar.....	H. Clyde Gregory...	Do.
The Cornucopia Mining Co.	Delaware.....	Mining.....	J. R. F. Savage.....	Do.
Hamilton & Chambers Co. (Inc.)	New York....	Constructing.....	Nelson T. Stacy.....	Cayey.
Purdy & Henderson.....	New Jersey...	.....do.....	Charles Hartzell....	San Juan.
Union Hispano Americana de Seguros.	Cuba.....	Insurance.....	Edward Ferrer.....	Do.
The National City Bank of New York.	New York....	Banking.....	Burt O. Clark.....	Do.
Corbin-Griffith Fruit Co. (Inc.)	.....do.....	Fruits.....	G. Adin Corbin.....	Vega Baja.

## STATEMENT 8.—Associations not for pecuniary profit registered in the office of the executive secretary during the fiscal year 1917-18.

Name.	Location.	Principal purposes.
<b>DOMESTIC.</b>		
Institute of Mission Helpers of Porto Rico.	Santurce, San Juan.	Religious, educational, and charitable.
Asociacion de Registered Nurses of Porto Rico.	San Juan.....	Advancement of profession of nursing and defense of its interests.
Congregacion de la Mision de San Vicente de Paul.	.....do.....	Religious and educational.
Asociacion de Abogados de Guayama (Bar Association of Guayama).	Guayama.....	Protection of lawyers and advancement of profession.
Liga Agraria.....	San Juan.....	Advancement of agriculture.
Lega No. 9600, de la Gran Orden Unida de Odd Fellows de America.	Bayamon.....	Fraternal.
Hijos del Porvenir.	Aguadilla.....	Mutual benefit.
Christian Science Society of San Juan, Porto Rico.	Santurce, San Juan..	Religious.
Asilo de Ancianos y Ninos Desamparados, de Yauco.	Yauco.....	Charitable.
Lega "Elabon de Borinquen" Numero 9733 de la Gran Orden Unida de Odd Fellows en America.	Catano, Bayamon...	Fraternal.
La Buena Fe.....	.....do.....	Mutual benefit.
Asociacion de Agricultores de Canas de la Region Oriental de Puerto Rico.	Humacao.....	Advancement of interests of sugar planters in their relations with sugar mills

NOTE.—No foreign.

## STATEMENT 9.—Domestic associations not for pecuniary profit dissolved during the fiscal year 1917-18.

Name.	Location.
Club de Damas de San Juan.....	San Juan.
Liga de Proprietarios de Fincas Urbanas de Mayaguez.....	Mayaguez.
Liga de Detallistas de Ponce.....	Ponce.
Liga de Rectificadores.....	San Juan.
Circulo de Amigos de San Sebastian.....	San Sebastian.
Asociacion de Constructores de Puerto Rico.....	San Juan.

## STATEMENT 10.—Associations not for pecuniary profit organized outside Porto Rico that ceased to do business in Porto Rico during the fiscal year 1917-18.

Name.	State where organized.	Principal office in Porto Rico.
Institute of Mission Helpers of Baltimore City.....	Maryland.....	San Juan.

## STATEMENT 11.—List of domestic associations existing and doing business on June 30, 1918.

Name.	Location.	Principal purposes.
Anglo-American Tennis Club.....	San Juan.....	Athletic entertainment.
The Democratic Party.....	.....do.....	Political.
Sovereign Grand Lodge of Free and Accepted Masons of Porto Rico.	.....do.....	Fraternal.
El Bello Ideal.....	Santurce.....	Instruction and amusement.
Asociacion de Senoras Damas del Santo Asilo de Ponce.	Ponce.....	Charitable.
Liga de Proprietarios de Fincas Urbanas de San Juan.	San Juan.....	Property owners.
Sociedad de Ingenieros de Puerto Rico.....	.....do.....	Professional.
Centro de Instruccion y Recreo de Barranquitas.	Barranquitas...	Social.
Luz y Progreso.....	Santurce.....	Instruction and amusement.
Esperanza de San Juan Lodge, 8715, G. O. U. O. F. in America.	Puerto de Tierra	Fraternal.
Asociacion de Profesionales de Puerto Rico...	San Juan.....	Professional.
Liga Progresista de Ponce.....	Ponce.....	Development of Ponce.
El Ancora.....	.....do.....	Beneficial.

STATEMENT 11.—*List of domestic associations existing and doing business on June 30, 1918.*

Name.	Location.	Principal purposes.
Asociación de Abogados de Puerto Rico.....	San Juan.....	Professional.
Asociación de Chauffeurs de Puerto Rico.....	do.....	Do.
National Coffee Growers' Association.....	Ponce.....	Coffee industry.
Asociación de Dependientes de Comercio.....	San Juan.....	Social.
Casino de Río Piedras.....	Río Piedras.....	Do.
The Saddle and Motor Country Club.....	Bayamon.....	Do.
Centro de Detallistas de Provisiones de Puerto Rico.	San Juan.....	Commercial.
Logia Palafox No. 174.....	do.....	Fraternal.
Logia Pl y Margal No. 282.....	do.....	Do.
Union Española.....	Mayaguez.....	Social.
Union Local de Trabajadores de Defensa y Beneficencia.	San German.....	Fraternal.
Logia Obreros Unidos No. 281.....	Arecibo.....	Do.
Centro Español de Yauco.....	Yauco.....	Social.
Logia Fraternidad Española No. 110.....	Ponce.....	Fraternal.
Logia Porvenir de Puerto Rico No. 302.....	Mayaguez.....	Do.
Asociación de Maestros de Puerto Rico.....	San Juan.....	Relations between teachers.
Liga de Republicanos Españoles de Puerto Rico.	do.....	Political.
Asociación de Agricultores de Río Grande, Loiza, y Carolina.	Loiza.....	Agricultural.
Liceo.....	Ponce.....	Educational.
La Hermandad.....	San German.....	Charitable.
Logia Hijos de Minerva No. 60.....	Vega Alta.....	Fraternal.
Asociación Cívica Puertorriqueña.....	San Juan.....	Civic.
La Caridad.....	Albionito.....	Beneficial.
Asociación Dental de Puerto Rico.....	San Juan.....	Professional.
Union Club.....	do.....	Social.
Club Bayamonés.....	Bayamon.....	Do.
Lodge "Estrella de Oriente" No. 30.....	Humacao.....	Fraternal.
Porto Rico Association.....	San Juan.....	Commercial.
Centro de Instrucción y Recreo de Juncos.....	Juncos.....	Social.
Asociación de Dependientes de Mayaguez.....	Mayaguez.....	Do.
Centro Español de Lares.....	Lares.....	Do.
Sociedad Centro Camuyano.....	Camuy.....	Do.
Asociación de Agricultores de Río Piedras, Caguas, Guaynabo y Trujillo Alto.	Río Piedras.....	Agricultural.
Ponce Democratic Club.....	Ponce.....	Political.
Asociación de Trabajadores Unidos de Puerto Rico.....	San Juan.....	Labor.
Gremio del Trabajo.....	Guayama.....	Beneficial.
Logia Adelpia.....	Mayaguez.....	Fraternal.
Biblioteca Pública de Cataño.....	Cataño.....	Educational.
Asilo de Huérfanos de Ponce.....	Ponce.....	Charitable and educational.
Hijas de la Caridad de San Vicente de Paul de Puerto Rico.	San Juan.....	Do.
Casino San Rafael.....	Quebradillas.....	Social.
El Zenit.....	San Juan.....	Beneficial.
Federación de los Espiritistas de Puerto Rico.....	do.....	Spiritualist doctrine.
Asociación del Personal Técnico del Servicio de Sanidad de Puerto Rico.....	do.....	Sanitation.
The Young Men's Christian Association of San Juan.....	do.....	Social.
Liga Antituberculosa de Ponce.....	Ponce.....	Charitable.
Logia Faro de la Marina No. 8680 (G. O. U. de O. F.).....	Ponce Playa.....	Fraternal.
Aguadilla Progresista.....	Aguadilla.....	Development of Aguadilla.
Siervas de María de Puerto Rico.....	San Juan.....	Charitable.
Liga Progresista de Coamo, P. R.....	Coamo.....	Development of Coamo.
Asociación de Abogados de Mayaguez (Bar Association of Mayaguez).....	Mayaguez.....	Professional.
Los Quinientos (Liga de Ciudadanos Progresistas.).....	do.....	Development of Mayaguez.
Círculo de Braceros de Guayama.....	Guayama.....	Recreative and educational.
Logia Patria.....	San Juan.....	Fraternal.
Casa de España en Puerto Rico.....	do.....	Union, fraternity and instruction of its members.
Asociación Médica de Puerto Rico.....	do.....	Professional.
La Erida del Maestro.....	do.....	Do.
American Pioneers of 1898.....	do.....	Social and fraternal.
Porto Rico Board of Fire Underwriters.....	do.....	Union of representatives of fire insurance companies in Porto Rico.
Colegio Puertorriqueño de Niñas.....	do.....	Educational.
Círculo Unión.....	Cayey.....	Recreative and educational.
Liga Antituberculosa de Puerto Rico.....	San Juan.....	Establishment and maintenance of hospitals for the treatment of tuberculosis.
Asociación de Periodistas.....	do.....	To help journalists.
Club Deportivo de Ponce.....	Ponce.....	Sports.
Sociedad Cooperativa Mútua el Bien por el Bien.....	Aguada.....	Mutual aid.

STATEMENT 11.—*List of domestic associations existing and doing business on June 30, 1918.*

Name.	Location.	Principal purposes.
Club Náutico San Juan (Inc.).....	San Juan.....	Nautical sport.
Gran Logía de Distrito No. 41, Gran Orden Unida de Odd Fellows.....	Ponce.....	Fraternal.
Asociación Protectora del Hogar.....	Mayaguez.....	Mutual aid.
Colegio Arecibo de Niñas.....	Arecibo.....	Educational.
Liga de Propietarios de Arecibo.....	.....do.....	Association of property owners.
Unión de Marinos No. 598.....	.....do.....	Mutual aid.
Asociación de Maestros Plomeros de Puerto Rico.....	San Juan.....	Protections among plumbers.
The Porto Rico Mission Conference of the Methodist Episcopal Church.....	.....do.....	Religious.
Quiterens.....	Ponce.....	Mutual aid.
Centro de Instrucción y Recreo de Gurabo.....	Gurabo.....	Recreative and educational.
Liga Anti-Alcohólica de Puerto Rico.....	San Juan.....	To combat alcoholism.
Casino Español de Río Piedras.....	Río Piedras.....	Social.
Logia Caballeros de la Noche.....	Juncos.....	Fraternal.
Ladies' Aid Church Society.....	Bayamon.....	Religious.
Logia Unión y Amparo.....	Caguas.....	Fraternal.
Hermanos Progresistas.....	Yauco.....	Mutual aid.
Asociación Profesional y Automovilista de Puerto Rico.....	San Juan.....	Mutual aid among chauffeurs.
Centro Adjuntado.....	Adjuntas.....	Social.
El Amparo.....	Mayaguez.....	Aid of members' family in cases of death of a member.
El Faro.....	.....do.....	Mutual benefit.
Casino de Lares.....	Lares.....	Social.
Porto Rico Fruit Growers' and Shippers' League.....	San Juan.....	Protection of the interests of fruit growers and shippers of Porto Rico.
Liga Progresista del Orocovis.....	Barros.....	Development of the town of Barros.
Sociedad Espiritista Regeneración Moral.....	Caguas.....	Spiritualism.
Iglesia Evangélica Puertorriqueña.....	Ponce.....	Religious.
Asociación de Colonos del Distrito Norte.....	Arecibo.....	Protection of sugar-cane growers.
Sociedad de Escogedores de Puerto Rico.....	San Juan.....	Protection of cigar sorters.
"La Recompensa" Sociedad de Auxilio Mutuo.....	Sabana Grande.....	Mutual benefit.
Institute of Mission Helpers of Porto Rico.....	Santurce.....	Religious, educational, and charitable.
Association of Registered Nurses of Porto Rico.....	San Juan.....	Advancement of profession of nursing and defense of its interests.
Congregación de la Misión de San Vicente de Padl.....	.....do.....	Religious and educational.
Asociación de Abogados de Guayama (Bar Association of Guayama).....	Guayama.....	Protection of lawyers and advancement of profession.
Liga Agraria.....	San Juan.....	Advancement of agriculture.
Logia No. 9560, de la Gran Orden Unida de Odd Fellows de America.....	Bayamon.....	Fraternal.
Hijos del Porvenir.....	Aguadilla.....	Mutual benefit.
Christian Science Society of San Juan, Porto Rico.....	Santurce.....	Religious.
Asilo de Ancianos y Niños Desamparados, de Yauco.....	Yauco.....	Charitable.
Logia "Estabón de Borinquen" Número 9752, de la Gran Orden Unida de Odd Fellows en America.....	Cataño.....	Fraternal.
La Buena Fe.....	.....do.....	Mutual benefit.
Asociación de Agricultores de Cañas de la Región Oriental de Puerto Rico.....	Humacao.....	Advancement of interests of sugar planters in their relations with sugar mills.

STATEMENT 12.—*List of associations organized outside of Porto Rico existing and doing business on June 30, 1918.*

Name.	Place where organized.	Principal purpose.	Name of the agent in Porto Rico.	Address of the agent.
The Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the United States of America.....	New York..	Religious....	Chas. B. Colmore.....	San Juan.
The Christian Woman's Board of Missions.....	Indiana.....	.....do.....	M. B. Wood.....	Bayamon.
The Woman's Home Missionary Society of the Methodist Episcopal Church.....	Ohio.....	.....do.....	James C. Murray.....	San Juan.
The Female Academy of the Sacred Heart.....	New York..	Educational.	Mad. Rosa de Bolivar.....	Santurce.
General Conference Corporation of Seventh Day Adventists.....	District of Columbia.	Religious....	Wm. Steele.....	Do.



STATEMENT 13.—*List of foreign consuls.*

Country.	Name.	Rank.	Residence.
Argentina Republic.....	Sergio Ramirez.....	Vice consul.....	San Juan.
Belgium.....	Ch. Renoz.....	Consul general.....	Habana, Cuba.
Do.....	J. E. Baldaña.....	Consul.....	San Juan.
Do.....	A. Bravo.....	Vice consul.....	Mayaguez.
Do.....	J. Laoot.....	.....do.....	Ponce.
Brazil.....	Waldemar E. Lee.....	.....do.....	San Juan.
Do.....	Albert Edward Lee.....	Commercial agent.....	Do.
Colombia.....	Manuel R. Calderón.....	Consul.....	Do.
Do.....	Manuel R. Morales.....	.....do.....	Ponce.
Costa Rica.....	Nicolás Megwinoff.....	.....do.....	San Juan.
Cuba.....	Gustavo Marín y de Herrera.....	.....do.....	Do.
Do.....	José Caminero Shelton.....	.....do.....	Ponce.
Do.....	Francisco Porto y Castillo.....	.....do.....	Mayaguez.
Do.....	Fernando Alemán y Vallée.....	Honorary consul.....	Arecibo.
Do.....	Ernesto H. Lienau y Lange.....	.....do.....	Aguadilla.
Denmark.....	T. G. I. Waymouth.....	Consul.....	San Juan.
Do.....	Pedro Juan Armstrong.....	Vice consul.....	Ponce.
Do.....	Alberto Bravo.....	.....do.....	Mayaguez.
Do.....	Antonio Roig.....	.....do.....	Humacao.
Dominican Republic.....	Sócrates Nolasco.....	Consul general.....	San Juan.
Do.....	Ramón Almonte.....	Consul.....	Ponce.
Do.....	Marino Cestero Castro.....	.....do.....	Mayaguez.
Do.....	Eduardo Fronteras.....	Vice consul.....	Aguadilla.
Do.....	José Janer.....	.....do.....	Humacao.
Do.....	Bias C. Silva.....	.....do.....	Ponce.
Do.....	Fernando Alemán.....	Honorary vice consul.....	Arecibo.
Do.....	J. C. Creanor.....	.....do.....	Guanica.
Do.....	Fernando Figueredo.....	.....do.....	San Juan.
France.....	Yves Louis Napoleon du Courthial.....	Vice consul.....	Do.
Do.....	Pierre Paul Biaggi.....	Consular agent.....	Ponce.
Do.....	Ch. Le Brun.....	.....do.....	Vieques.
Do.....	Eugenio Elle Lefranc.....	.....do.....	Arecibo.
Do.....	Dr. André Orsini.....	.....do.....	Mayaguez.
Do.....	P. Santos.....	.....do.....	Humacao.
Germany <sup>1</sup> .....	.....	.....	.....
Great Britain.....	Edward Mervyn de Garston.....	Consul.....	San Juan.
Do.....	C. W. Elphick.....	Acting consul.....	Do.
Do.....	Thomas Boothby, Jr.....	Vice consul.....	Mayaguez.
Do.....	William Henry Augustus Denton.....	.....do.....	Arecibo.
Do.....	Henry Alexander McCormick.....	.....do.....	Arroyo-Guayama.
Do.....	Antonio Roig.....	.....do.....	Humacao.
Do.....	Fernando Miguel Toro.....	.....do.....	Ponce.
Guatemala.....	Carlos Vére.....	Consul.....	San Juan.
Haiti.....	Charles Vére.....	.....do.....	Do.
Do.....	Bias C. Silva.....	Vice consul.....	Ponce.
Italy.....	Ciro Malatrasi.....	Consul.....	San Juan.
Do.....	G. P. de Rinaldis.....	Consular agent.....	Ponce.
Do.....	Giacomo Antonio Caino.....	.....do.....	Mayaguez.
Japan.....	Chonosuke Yada.....	Consul general.....	New York.
Mexico.....	Luis Cuevas Zequeira.....	In charge of consulate.....	San Juan.
Netherlands.....	Albert E. Lee.....	Consul.....	Do.
Do.....	Jacobo Bravo.....	Vice consul.....	Mayaguez.
Do.....	Ernesto Moringlane.....	.....do.....	Ponce.
Norway.....	Waldemar E. Lee.....	Consul.....	San Juan.
Do.....	William Henry Bliscombe.....	In charge of vice consulate.....	Ponce.
Panama.....	Charles Vére.....	Consul.....	San Juan.
Do.....	Matías Vidal.....	Honorary consul.....	Ponce.
Paraguay.....	Manuel Fernández Juncos.....	Consul.....	San Juan.
Peru.....	Benito Zaldondo.....	.....do.....	Do.
Do.....	Guillermo H. Moscoso.....	Honorary vice consul.....	Mayaguez.
Portugal <sup>2</sup> .....	José María Lomba.....	Consul.....	San Juan.
Do.....	Emilio de Motta y Ortiz.....	.....do.....	Do.
Spain <sup>2</sup> .....	Juan Vázquez y López Amor.....	Honorary consul.....	Mayaguez.
Do.....	Alberto Burckhart y Telada.....	Honorary vice consul.....	Arecibo.
Do.....	Juan Casellas.....	.....do.....	Aguadilla.
Do.....	Francisco Pelegrí Roger.....	.....do.....	Mayaguez.
Do.....	Avelino Portela Rolán.....	.....do.....	Vieques.
Do.....	Florencio Suárez.....	.....do.....	Ponce.
Sweden.....	Johann Friedrich von Uffel Schomburg.....	Consul.....	San Juan.
Do.....	Max Karl Wilhelm Heine.....	Vice consul.....	Ponce.

<sup>1</sup> Records of former German consulate at San Juan and vice consulates at Arecibo, Aguadilla, and Ponce handed over to Spanish consul and vice consuls, respectively.

<sup>2</sup> Records of former German consulate at San Juan and vice consulates at Arecibo, Aguadilla, and Ponce taken over by Spanish consul and vice consuls, respectively.

STATEMENT 13.—*List of foreign consuls—Continued.*

Country.	Name.	Rank.	Residence.
Uruguay.....	Manuel Mendía Morales.....	Consul.....	San Juan.
Do.....	Carlos Armstrong.....	Vice consul.....	Ponce.
Do.....	Jacobo Bravo y González.....	do.....	Mayaguez.
Do.....	Manuel Gómez López.....	do.....	San Juan.
Venezuela.....	José María Betancourt Montbrun.....	Consul.....	Do.
Do.....	Sebastián Bonet.....	do.....	Arecibo.
Do.....	Thomas Boothby, Jr.....	Honorary consul.....	Mayaguez.

STATEMENT 14.—*List of notaries public registered in office of the executive secretary of Porto Rico on June 30, 1918.*

[Names of notaries who registered during the fiscal year 1917-18 are followed by an asterisk (\*).]

Name.	Residence.	Date of registration.
Abellao Blanco, Luis.....	San Juan.....	Dec. 20, 1905
Acovedo, Francisco.....	Lares.....	Mar. 2, 1914
Acosta, Mariano R.....	Aguadilla.....	Jan. 6, 1906
Acosta y Quintero, Ed.....	Ponce.....	Aug. 9, 1907
Aceña Aybar, Eduardo.....	San Juan.....	Mar. 25, 1902
Agosto Abadía, Adrián.....	do.....	Apr. 22, 1910
Agrait Aldes, Ricardo.....	Arecibo.....	May 20, 1908
Alegria, José S.....	Manatí.....	Jan. 13, 1913
Alemar y Bosa, Juan (*).....	Mayaguez.....	Jan. 22, 1918
Alfonso Benú, Osvaldo.....	Utua.....	Nov. 17, 1903
Amadeo, Antonio J.....	San Juan.....	June 27, 1910
Amadeo Rivera, Pedro.....	Arecibo.....	Jan. 28, 1909
Antonsanti, Frank.....	San Juan.....	Feb. 1, 1907
Aponte Rodríguez, Arturo.....	Humacao.....	Nov. 30, 1908
Aponte Rodríguez, Leandro.....	Yabucoa.....	Feb. 1, 1906
Arce Rollet, Rafael.....	Gaguas.....	July 7, 1902
Arnaldo Sebilla, Alfredo.....	Mayaguez.....	Mar. 25, 1912
Arrillaga Urrutia, Rafael.....	Añasco.....	Oct. 22, 1916
Barceló, Antonio R.....	Fajardo.....	Aug. 16, 1916
Becerra Lacot, Luis A.....	Ponce.....	July 24, 1902
Benedicto y Geigel, José.....	San Juan.....	Feb. 4, 1903
Benítez, Celestino.....	Humacao.....	Mar. 5, 1913
Benítez Flores, Manuel.....	San Juan.....	Sept. 3, 1912
Bernardini de la Huerta T.....	Guayama.....	June 3, 1901
Besosa, Harry F.....	San Juan.....	June 24, 1914
Blanes, Enrique.....	Mayaguez.....	Oct. 4, 1911
Blasco y Pagan, Alfredo.....	Aguadilla.....	Apr. 7, 1910
Brunet del Valle, Carlos.....	Juana Díaz.....	July 16, 1913
Bruy y Alvarez, Alberto.....	Camuy.....	Dec. 5, 1903
Buitrago, Carlos B.....	Caguas.....	June 27, 1911
Calzada y Hernández, G.....	Fajardo.....	May 29, 1902
Campillo, Enrique.....	San Juan.....	Jan. 24, 1913
Canales y Rivera, Nemesio.....	Ponce.....	Mar. 11, 1908
Capó Cintrón, Eduardo.....	San Juan.....	Mar. 31, 1911
Capó Matres, Luis.....	Guayama.....	June 24, 1910
Carballeira Cañellas, I.....	San Juan.....	Feb. 1, 1912
Casaldino y Golcoches, F.....	Ponce.....	Apr. 13, 1901
Casta Fornés, Gerónimo.....	Añasco.....	Mar. 10, 1914
Castillo León, Tomás.....	Ponce.....	Dec. 2, 1907
Castro, Antonio F.....	do.....	Oct. 6, 1913
Cervony Gely, Francisco.....	Guayama.....	Nov. 10, 1910
Cintrón Lastra, Rafael.....	do.....	Oct. 15, 1912
Coballes Gandía, Lorenzo.....	Hatillo.....	June 24, 1914
Cobián y Romeu, Rafael.....	Bayamón.....	May 1, 1903
Coli Cuchi, Cayetano.....	San Juan.....	May 18, 1908
Coli Cuchi, José.....	do.....	July 8, 1912
Cordero Rodríguez, Resendo.....	Barros.....	Dec. 23, 1913
Cortés, Francisco R. (*).....	Ponce.....	Mar. 14, 1918
Crespo, Ulpiano, jr.....	Arecibo.....	Oct. 27, 1913
Días, José E.....	San Juan.....	Oct. 7, 1910
Diego, José de.....	Mayaguez.....	Apr. 3, 1901
Dominguez, Jorge.....	San Juan.....	Dec. 15, 1910
Dominguez, Rubio Celestino.....	Guayama.....	Mar. 8, 1904
Dottin, Eduardo H. F.....	San Juan.....	Sept. 26, 1913
Esteves, José de J.....	Manatí.....	Feb. 2, 1912
Fajardo Martínez, Pascasio.....	Mayaguez.....	Apr. 12, 1915
Feliú, Leopoldo.....	do.....	May 9, 1910
Fernández, García B.....	Cayey.....	Mar. 11, 1910
Fernández, José F.....	Ponce.....	July 28, 1904
Ferrer, Rafael F.....	San Juan.....	May 15, 1911

## STATEMENT 14.—List of notaries public registered in office of the executive secretary of Porto Rico on June 10, 1918—Continued.

Name.	Residence.	Date of registration.
Figueroa, Manuel.....	Arecibo.....	Mar. 27, 1907
Flores Colón, Eduardo.....	Ponce.....	Nov. 14, 1913
Forés, Benito.....	San German.....	July 10, 1902
Francis, Hug. R.....	San Juan.....	Aug. 21, 1911
Francis Soto, Carlos.....	Aguadilla.....	Mar. 11, 1906
García de la Noceda, C.....	Río Grande.....	Sept. 25, 1918
García Ducós, Alberto.....	Aguadilla.....	Dec. 5, 1916
García Ducós, Juan.....	do.....	Dec. 17, 1912
García Ducós, Sandalio (*).....	do.....	Jan. 17, 1912
García Méndez, Juan B. (*).....	do.....	Dec. 12, 1917
García Mujica, Ramón (*).....	do.....	Nov. 14, 1917
García Veva, Angel.....	Carolina.....	Apr. 1, 1902
García Yanguas, A. (*).....	Fajardo.....	Dec. 18, 1917
Geigel, Juan Eugenio.....	San German.....	Oct. 13, 1904
Geigel Sabat, Bernardo J.....	Mayaguez.....	May 2, 1910
Giménez, Francisco.....	San Juan.....	Apr. 12, 1910
Giménez García, Lorenzo.....	Ponce.....	July 11, 1902
Gómez, José I.....	Caguas.....	Aug. 26, 1904
Gómez, Ricardo A.....	Arecibo.....	Jan. 17, 1914
González Darder, Enrique.....	Mayaguez.....	July 3, 1906
González Fagundo, Francisco.....	San Juan.....	Jan. 10, 1911
González García, Pedro.....	Humacao.....	Jan. 29, 1909
González y González, J. C.....	San Juan.....	Nov. 26, 1902
González López, Martín.....	do.....	Feb. 11, 1901
González Mena, Enrique.....	San Lorenzo.....	June 19, 1911
Guerro, Gabriel.....	Aguadilla.....	Feb. 9, 1909
Guerro, Miguel.....	San Juan.....	May 23, 1910
Guillermety, Rafael.....	do.....	Feb. 20, 1908
Guzmán Benítez, J. de.....	do.....	Sept. 10, 1914
Guzmán Benítez, Juan de.....	do.....	July 6, 1901
Guzmán, Miguel.....	do.....	Feb. 3, 1913
Hernández, Ignacio.....	Salinas.....	Dec. 22, 1916
Hernández López, Juan.....	Río Piedras.....	Nov. 25, 1902
Hernández Usara, José.....	San Juan.....	June 12, 1906
Horton, Benjamín J.....	do.....	Jan. 23, 1913
Huyke, Juan B.....	Mayaguez.....	June 30, 1911
Igartúa Avilés, Victor.....	Humacao.....	Dec. 28, 1916
Iriarte, Celestino, Jr.....	Quebradilla.....	June 20, 1911
Lefebre, Enrique.....	San Juan.....	May 22, 1913
León Lugo, Sergio.....	do.....	Dec. 9, 1913
León Rafael.....	Juana Díaz.....	Jan. 19, 1901
Llorens Torres, Luis *.....	Ponce.....	Mar. 28, 1918
López Acosta, Eusebio *.....	San Juan.....	May 29, 1918
López Acosta, José A.....	San German.....	Dec. 9, 1907
López, Antonio L.....	do.....	Feb. 12, 1917
López de Victoria, Gilbero.....	Caguas.....	Apr. 20, 1918
López Gastambide, Eugenio.....	Yauco.....	Sept. 18, 1903
López Tizol, Eduardo.....	San Juan.....	Feb. 10, 1914
Marín Marién, Alberto.....	do.....	Feb. 11, 1913
Marín Marién, Eduardo.....	do.....	Do.
Márquez y Abrams, Lemuel.....	Utüado.....	Mar. 9, 1909
Márquez Huertas, Enrique.....	Quebradilla.....	Dec. 24, 1908
Martínez Álvarez, Rafael.....	Bayamon.....	Nov. 4, 1910
Martínez Dávila, José.....	San Juan.....	Jan. 14, 1909
Martínez Dávila, Manuel A.....	do.....	Jan. 10, 1911
Martínez, Fernando E.....	Guayama.....	Mar. 6, 1914
Martínez, Frank.....	San Lorenzo.....	Dec. 29, 1915
Martínez, José C.....	San Juan.....	Jan. 10, 1911
Martínez Nadal, Rafael.....	do.....	Jan. 14, 1913
Martínez Rivas, Carmelo.....	Ponce.....	July 30, 1902
Mas, Félix C.....	do.....	Feb. 7, 1913
Mena La Torre, Andrés.....	Caguas.....	Feb. 20, 1912
Méndez, Vaz, Luis.....	do.....	June 5, 1901
Méndiz Sabat, Luis.....	Mayaguez.....	Oct. 17, 1911
Mercader, Luis.....	Caguas.....	Oct. 17, 1912
Miranda, Herminio.....	Aguadilla.....	Feb. 18, 1913
Monserat y Simó, Damián.....	Arecibo.....	Jan. 17, 1902
Monserat y Suró, Damián.....	San Juan.....	June 19, 1906
Montalvo Quenard, Luis.....	do.....	Sept. 16, 1916
Morales Acosta, Ignacio.....	Mayaguez.....	May 19, 1913
Morales Marcos, Miguel.....	Bayamon.....	Jan. 27, 1914
Morera Martínez, Juan.....	San Juan.....	June 28, 1906
Moscoso, Guillermo H.....	do.....	Jan. 14, 1913
Muñoz Morales, Luis.....	Mayaguez.....	Mar. 17, 1906
Navarro Ortiz, Francisco.....	San Juan.....	Jan. 14, 1913
Nazario de Figueroa y J. J.....	Cayey.....	July 10, 1901
Nazario Lugo, Amadeo.....	San German.....	May 11, 1911
Noguera, Juan B.....	Yauco.....	Feb. 18, 1918
Oller Díaz, José.....	Cayey.....	June 29, 1906
Otero Rivera, Francisco*.....	Bayamon.....	Jan. 7, 1918

STATEMENT 14.—*List of notaries public registered in office of the executive secretary of Porto Rico on June 30, 1918—Continued.*

Name.	Residence.	Date of registration.
Padilla, Félix Luis.....	Juana Dias.....	Feb. 2, 1917
Padró Angel.....	Arecibo.....	Feb. 27, 1904
Palacios y Rodríguez, R.....	San Juan.....	July 29, 1901
Palmer, Santiago B.....	do.....	Oct. 4, 1901
Parra, Francisco.....	Ponce.....	Mar. 5, 1901
Parrell y Rius, Augusto.....	do.....	Nov. 9, 1906
Paz Urdaz, Manuel.....	Arecibo.....	Nov. 20, 1903
Paz y Ruiz, Tomás.....	Rio Grande.....	Feb. 8, 1915
Pérez, Quíñones, Luis.....	Humacao.....	Feb. 21, 1918
Pérez, Celestino J.....	Comerio.....	Jan. 22, 1909
Pérez, Rafael B.*.....	Ponce.....	Dec. 21, 1917
Pesquera, Ramón S.....	Bayamon.....	Apr. 9, 1910
Peña, Abraham.....	Mayaguez.....	Mar. 1, 1917
Piñero Rodríguez, Antonio.....	Quebradilla.....	Nov. 6, 1915
Piñero Rodríguez, Fulgencio.....	Juncos.....	Jan. 25, 1912
Polanco de Jesús, Valentín.....	Manati.....	Jan. 13, 1913
Ponsa Parés, Enrique.....	San Juan.....	Mar. 16, 1911
Poventud, Alberto S.....	Ponce.....	Feb. 15, 1917
Prado Morales, Francisco.....	Manati.....	June 29, 1901
Quintana Cajas, Alfonso.....	Coamo.....	Dec. 9, 1913
Quíñones y Quíñones, Ramón.....	Mayaguez.....	June 4, 1901
Ramírez de Arellano, F.....	San Juan.....	Apr. 27, 1908
Ramírez Santibáñez, José*.....	do.....	Feb. 6, 1918
Ramírez Vigo, Rodolfo.....	Mayaguez.....	Feb. 17, 1903
Ramos, José C.....	Guayama.....	Mar. 3, 1908
Richard del Valle, Arturo.....	Aguadilla.....	Mar. 12, 1906
Richard del Valle, Augusto.....	do.....	Apr. 18, 1910
Riera Palmer, Mariano.....	Mayaguez.....	Jan. 14, 1901
Rincón Plumey, Enrique.....	San Juan.....	Nov. 14, 1912
Rivera, Manuel A.....	Coamo.....	Nov. 20, 1906
Rodríguez, Antonio.....	Patillas.....	Dec. 17, 1913
Rodríguez Artemio, F.....	San Juan.....	Dec. 13, 1910
Rodríguez Bermúdez, José M.*.....	Arecibo.....	Dec. 12, 1917
Rodríguez Cebollero, José C.....	Manati.....	Apr. 13, 1910
Rodríguez, Gustavo.....	Ponce.....	July 7, 1904
Rodríguez, José D.....	Lares.....	Dec. 28, 1913
Rodríguez, Juan D.....	Arecibo.....	Jan. 11, 1901
Rodríguez Ortíz, V. F.....	Cayey.....	Mar. 9, 1908
Rodríguez, Ramón F.....	San Juan.....	Feb. 17, 1914
Rodríguez Flores, Ramón H.....	Rio Piedras.....	Dec. 29, 1916
Rodríguez Rivera, Vicente.....	Cayey.....	Jan. 24, 1913
Rodríguez Sierra, Manuel.....	San Juan.....	Nov. 8, 1905
Román Font, Abelardo*.....	San Sebastián.....	Feb. 12, 1918
Rosay, Manuel F.....	San Juan.....	Feb. 17, 1909
Roura, Dr. Ramón.....	Mayaguez.....	Mar. 4, 1901
Ruiz de Val, José.....	Rio Piedras.....	Feb. 10, 1917
Sabater, José.....	Mayaguez.....	Feb. 24, 1911
Salcscrup Colón, Mannel A.....	Ponce.....	Apr. 7, 1903
Sánchez Vahamonde, Luis*.....	Rio Grande.....	Jan. 18, 1918
Sánchez Montalvo, Rafael.....	do.....	Dec. 28, 1904
Santana, Pedro, Jr.....	San Juan.....	May 27, 1913
Santiago Carmona, Leopoldo.....	Comerio.....	June 13, 1908
Santoni, Félix.....	Arecibo.....	Apr. 6, 1904
Seix y Rosali, Jaime Casimiro.....	Ponce.....	Nov. 26, 1908
Saca Pacheco, Ramón.....	San Juan.....	Oct. 26, 1914
Soto Gras, Francisco.....	do.....	Apr. 18, 1910
Soto, Juan B.....	Aguadilla.....	Oct. 28, 1910
Soto Nussa, Isidoro*.....	do.....	Nov. 22, 1917
Souffront Echevarría, Oscar*.....	Mayaguez.....	Apr. 13, 1918
Suau Carbonell, Salvador.....	San Juan.....	June 9, 1906
Salveras Rivera, Antonio.....	Arecibo.....	Nov. 11, 1903
Timothée, Pedro C.....	do.....	June 25, 1913
Todd, Roberto H.....	San Juan.....	July 30, 1908
Tormes, García, Leopoldo.....	Ponce.....	May 5, 1913
Toro Colberg, Miguel del.....	Cabo Rojo.....	Oct. 5, 1910
Toro Fernández, C. del.....	do.....	Apr. 27, 1910
Toro, F. Manuel.....	Ponce.....	Jan. 3, 1906
Toro Soler, Ricardo del.....	Cabo Rojo.....	Jan. 22, 1908
Toro Vendrell, Rafael.....	Ponce.....	Mar. 1, 1901
Torre y Garrido, Francisco de la.....	San Juan.....	Jan. 16, 1906
Torres, José G.....	do.....	Dec. 26, 1906
Torres Ballaberry, José Q.....	Salinas.....	May 1, 1913
Torres Monge, Sandoño.....	San Juan.....	June 30, 1915
Torres Pérez, Tomás*.....	Ponce.....	Apr. 23, 1918
Torres Solá, Hariberto.....	Rio Piedras.....	Dec. 18, 1916
Tous Soto, José.....	Ponce.....	Jan. 4, 1907

STATEMENT 14.—*List of notaries public registered in office of the executive secretary of Porto Rico on June 30, 1918—Continued.*

Name.	Residence.	Date of registration.
Tous Soto, Manuel.....	Humacao.....	Mar. 11, 1909
Traveder, Carlos.....	do.....	June 23, 1910
Travesio Nieva, Martín.....	San Juan.....	Oct. 6, 1915
Trujillo Guill, Antonio.....	do.....	May 31, 1912
Urrutia, Carlos V.....	Añasco.....	Mar. 7, 1912
Valdez Cajas, Ulpiano.....	Humacao.....	Feb. 24, 1903
Vázquez, Angel A.....	Mayaguez.....	Oct. 4, 1910
Vázquez Fernando.....	do.....	Mar. 29, 1913
Vendrell, Joaquín.....	Humacao.....	Jan. 21, 1913
Vicenty, Francisco *.....	San Juan.....	Mar. 11, 1918
Villaronga Charriez, Luis *.....	Barranquitas.....	Jan. 22, 1918
Wood, O. M.....	San Juan.....	Oct. 17, 1910
Yordán Dávila, Luis.....	Ponce.....	Feb. 23, 1903
Zavaleta Llompert, Miguel.....	Guayama.....	Nov. 11, 1902
Zayas Pizarro, Vicente.....	Ponce.....	Nov. 12, 1912
Zeno Sama, Gustavo.....	Arecibo.....	Oct. 3, 1916



STATEMENT No. 15.—Bureau of Weights and Measures—Table showing work according to daily and

Towns.	Scales.												Weights.			
	Counter.				Spring.				Platform.							
	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.
Adjuntas:																
Insular inspection	46		2	1	1				25		3		426		162	18
Municipal inspection	1								2				186		1	5
Total	47		2	1	1				27		3		612		163	23
Aguada:																
Insular inspection	35		4		3				4				298		48	15
Municipal inspection	73				3				17				599		226	26
Total	108		4		6				21				897		274	41
Aguadilla:																
Insular inspection	121		9		5		1		22		6		766		475	89
Municipal inspection	54								1				514			
Total	175		9		5		1		23		6		1,280		475	89
Aguas Buenas:																
Insular inspection	46		5	1	12		3		10		1		301		164	18
Municipal inspection																
Total	46		5	1	12		3		10		1		301		164	18
Aibonito:																
Insular inspection	139		7	19	15		2	1	46		6	1	1,674		52	197
Municipal inspection	27				5				9				323		6	2
Total	166		7	19	20		2	1	55		6	1	1,997		58	199
Añasco:																
Insular inspection									2							
Municipal inspection	105		2		1		1		34		3		877	48	206	18
Total	105		2		1		1		36		3		877	48	206	18
Arecibo:																
Insular inspection	132		20		3				10		2	1	907		316	41
Municipal inspection	137	2	2	2	3	1	4		69		2		2,603		302	259
Total	269	2	22	2	6	1	4		79		4	1	3,510		618	300
Arroyo:																
Insular inspection	94		3	1	18		3		27		7		860		197	64
Municipal inspection	20		1	1	1	1		2	5	1			216	64	85	12
Total	114		4	2	19	1	3	2	32	1	7		1,076	64	282	76
Barceloneta:																
Insular inspection	30		6	2					10		4		252		102	28
Municipal inspection	38		4		6				15		1		278		115	24
Total	68		10	2	6				25		4	1	530		217	52
Barranquitas:																
Insular inspection	39		1	2	11		1		6		1	1	355			18
Municipal inspection																
Total	39		1	2	11		1		6		1	1	355			18
Barros:																
Insular inspection	51		1	2	14		2	11			4	2	380		180	25
Municipal inspection	23		1		11		2	1					200		15	
Total	74		2	2	25		4	12			4	2	580		195	25

accomplished in each municipality by insular and municipal inspectors, respectively, fortnightly reports.

Measures.				Miscellaneous. <sup>1</sup>				Total.				Packages.		
Liquid.		Linear.		Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and comis. aled.	Heavy.	Correct.	Light.
Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.											
78	8	17	1 4						593	176	23		24	
									189	1	5	530	5,846	274
78	8	17	1 4						782	177	28	530	5,870	274
72	5	7	1						419	58	15		15	
110	8	13	1						815	226	35	3,425	13,139	262
182	5	8	20	1	1				1,234	284	50	3,425	13,154	262
313	9	4	15	5	2				1,242	505	95	7	69	14
528		3							1,097		3			
841	9	7	15	5	2				2,339	505	98	7	69	14
116		12	27			12	10		522		173	43		
												253	906	22
116		12	27			12	10		522		173	43	253	906
463		7	73	9	4				2,414	67	234	35	12	
72	1	24		1	6				466	6	4		760	1
535		8	97			10	10		2,880		73	238	35	772
									2			18	93	
126			35	5					1,178	48	216	19	3,319	6,156
														370
126			35	5					1,180	48	216	19	3,337	6,249
														370
371	12	15	69	4	5				1,497		350	61	53	396
37		6	688	5	1	3			3,540	3	315	268		676
														192
408	12	21	757	5	5	8			5,037	3	605	329	53	1,072
														194
162	4	7	44	2					1,205		214	74	3	17
14		1	30						286	66	88	16	361	405
														107
176	4	8	74	2					1,491	66	300	90	364	422
														107
106	9	3	15	4					413		121	37	10	43
30		2	42	12					409		119	39	6	646
														28
126	9	5	57			16			822		240	76	16	689
														53
140		5	27			15			578		2	42		
140		5	27			15			578		2	42		
171		5	35	13	45				707		185	49		103
15			11	1					261		16	3	43	133
														15
186		5	46	14	45				958		201	52	43	236
														16

<sup>1</sup> Computing scales, coffee measures, measuring pumps, and milk bottles and jars



STATEMENT No. 15.—*Bureau of Weights and Measures—Table showing work according to daily and*

Towns.	Scales.												Weights.			
	Counter.				Spring.				Platform.							
	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.
Bayamon:																
Insular inspection.....	84	...	3	8	28	...	3	2	33	...	6	...	1,051	...	281	41
Municipal inspection..	87	...	1	1	16	...	3	...	12	...	4	...	278	...	122	4
Total.....	151	...	4	9	44	...	6	2	45	...	10	...	1,329	...	403	45
Cabo Rojo:																
Insular inspection.....	234	...	4	...	6	...	1	2	22	3	5	...	1,088	3	428	21
Municipal inspection..	73	...	...	1	6	...	...	...	6	...	6	...	433	...	220	26
Total.....	307	...	4	1	12	...	1	2	28	3	11	...	1,521	3	648	47
Caguas:																
Insular inspection.....	149	...	15	...	43	...	8	1	55	...	23	...	1,708	...	583	88
Municipal inspection..	6	4	...	1	3	...	...	1	9	9	...	...	446	...	...	9
Total.....	155	4	15	1	46	...	8	2	64	9	23	...	2,152	...	583	97
Camuy:																
Insular inspection.....	153	...	5	...	1	...	...	...	34	...	16	...	1,141	...	323	48
Municipal inspection..	62	...	2	1	...	...	...	...	16	...	4	...	567	...	26	15
Total.....	215	...	7	1	1	...	...	...	50	...	20	...	2,108	...	349	63
Carolina:																
Insular inspection.....	37	...	3	2	28	...	1	2	10	...	2	...	344	...	123	45
Municipal inspection..	42	...	6	...	23	...	6	5	16	...	3	...	390	...	201	13
Total.....	79	...	9	2	51	...	7	7	26	...	5	...	724	...	324	58
Cayey:																
Insular inspection.....	44	...	1	...	5	...	...	...	13	...	3	...	188	...	71	27
Municipal inspection..	163	...	...	2	53	...	1	2	62	...	5	...	1,379	...	373	23
Total.....	207	...	1	2	58	...	1	2	75	...	8	...	1,567	...	444	50
Ceiba:																
Insular inspection.....	27	...	1	3	8	...	...	...	6	...	1	...	166	...	96	12
Municipal inspection..	2	...	...	...	7	...	3	...	1	...	...	...	82	...	...	...
Total.....	29	...	1	3	15	...	3	...	7	...	1	...	248	...	96	12
Ciales:																
Insular inspection.....	41	...	5	1	6	...	1	...	19	...	5	...	539	...	157	30
Municipal inspection..	27	...	1	...	9	...	1	...	16	...	...	...	352	...	71	4
Total.....	68	...	6	1	15	...	2	...	35	...	5	...	891	...	228	34
Cidra:																
Insular inspection.....	49	...	3	3	5	...	...	2	9	...	1	...	298	...	186	8
Municipal inspection..	11	...	...	...	...	...	...	...	1	...	...	...	164	...	...	...
Total.....	60	...	3	3	5	...	...	2	10	...	1	...	472	...	186	8
Coamo:																
Insular inspection.....	142	...	4	7	8	...	...	...	49	7	2	1	1,151	...	442	146
Municipal inspection..	53	...	1	3	15	...	...	2	2	...	...	...	590	25	81	51
Total.....	195	...	5	10	23	...	...	2	51	7	2	1	1,741	25	523	196
Comerio:																
Insular inspection.....	102	...	17	2	30	...	5	3	53	...	25	...	945	...	299	38
Municipal inspection..	...	...	...	...	...	...	...	...	2	...	...	...	9	...	...	...
Total.....	102	...	17	2	30	...	5	3	55	...	25	...	954	...	299	38

accomplished in each municipality by insular and municipal inspectors, respectively, fortnightly reports—Continued.

Measures.				Miscellaneous.				Total.				Packages.		
Liquid.		Linear.												
Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Heavy.	Correct.	Light.
290	.....	.....	32	96	.....	14	9	1,591	.....	294	97	46	87	211
330	.....	1	1	22	.....	1	.....	725	.....	131	7	89	90	21
620	.....	1	33	118	.....	15	9	2,316	.....	425	104	135	177	235
91	.....	.....	.....	14	.....	1	7	1,461	6	439	30	148	440	1
57	.....	.....	4	29	.....	1	1	604	.....	226	32	486	2,841	165
148	.....	.....	4	43	.....	1	8	2,065	6	665	62	634	3,281	166
418	.....	.....	14	188	.....	21	5	2,564	.....	629	124	42	271	50
141	.....	.....	.....	37	.....	.....	.....	642	13	.....	11	106	168	8
559	.....	.....	14	225	.....	21	5	3,206	13	629	135	148	439	67
416	.....	.....	13	172	.....	2	.....	2,317	.....	344	63	9	84	43
151	.....	.....	2	102	.....	6	4	831	.....	32	18	56	66	99
567	.....	.....	13	207	.....	4	.....	3,148	.....	376	81	65	150	142
210	.....	1	6	38	.....	7	.....	667	.....	130	62	.....	40	.....
160	.....	.....	2	102	.....	.....	.....	723	.....	222	24	2,635	897	1,258
370	.....	1	8	140	.....	6	11	1,390	.....	352	86	2,635	937	1,258
20	.....	.....	.....	2	.....	.....	.....	272	.....	75	27	24	14	8
182	.....	.....	3	161	.....	2	86	2,086	.....	379	41	2,266	3,831	177
202	.....	.....	3	163	.....	2	86	2,358	.....	454	68	2,290	3,845	185
71	.....	2	.....	10	.....	.....	.....	288	.....	100	15	.....	.....	.....
	.....	.....	.....	5	.....	.....	.....	97	.....	3	.....	.....	273	.....
71	.....	2	.....	15	.....	.....	.....	385	.....	103	15	.....	273	.....
207	.....	1	2	46	.....	1	6	978	.....	170	39	.....	.....	.....
17	.....	.....	.....	4	.....	.....	120	425	.....	73	4	19	391	2
224	.....	1	2	50	.....	1	6	1,403	.....	243	43	19	391	2
6	.....	.....	10	4	.....	2	.....	371	.....	190	25	3	119	1
1	.....	.....	1	.....	.....	.....	.....	187	.....	.....	1	92	3,218	296
7	.....	.....	11	4	.....	2	.....	558	.....	190	26	95	3,337	296
252	.....	.....	.....	28	.....	3	6	1,633	7	451	166	.....	414	.....
83	.....	.....	.....	4	.....	.....	3	750	25	82	56	1,058	5,206	13
338	.....	.....	7	32	.....	3	6	2,383	82	533	222	1,058	5,620	13
346	.....	.....	10	103	.....	23	28	1,607	.....	346	76	.....	48	.....
	.....	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	.....	.....	.....
346	.....	.....	10	103	.....	23	28	1,618	.....	346	76	.....	48	.....

STATEMENT No. 15.—Bureau of Weights and Measures—Table showing work according to daily and

Towns.	Scales.												Weights.			
	Counter.				Spring.				Platform.							
	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.
Corozal:																
Insular inspection.....	64		4		27		1	1	12				671		249	2
Municipal inspection.....																
Total.....	64		4		27		1	1	12				671		249	2
Dorado:																
Insular inspection.....	3		1						3		1		22		17	
Municipal inspection.....	88		2		14		2		42				906		17	13
Total.....	91		3		14		2		45		1		928		34	13
Fajardo:																
Insular inspection.....	78		2	1	31		2		39		10		1,120		260	46
Municipal inspection.....	1				12				4				1			
Total.....	79		2	1	46		2		43		10		1,131		260	46
Guanica:																
Insular inspection.....	3		2										37			
Municipal inspection.....	56				10				38		1		579			
Total.....	59		2		10				38		1		616			
Guaynabo:																
Insular inspection.....	4		1				1		2			1	51			6
Municipal inspection.....	62		3		12				16				452		20	33
Total.....	66		3	1	12			1	18			1	503		20	39
Guayama:																
Insular inspection.....	4		2						6		1		44			4
Municipal inspection.....	60		16	1	20		1	2	35		8		673		223	19
Total.....	64		18	1	20		1	2	35		9		717		223	23
Guayanilla:																
Insular inspection.....	82		4	1	5				21		6		652		49	146
Municipal inspection.....																
Total.....	82		4	1	5				21		6		652		49	146
Gurabo:																
Insular inspection.....	69		8	3	27		1	2	27		12		740		156	59
Municipal inspection.....																
Total.....	69		8	3	27		1	2	27		12		740		156	59
Hatillo:																
Insular inspection.....	91		13	1	6		1	1	14		10	2	860		285	21
Municipal inspection.....	6		1		1				2			1	32		15	1
Total.....	97		14	1	7		1	1	16		10	3	892		300	22
Hormigueros:																
Insular inspection.....			1						4				4			
Municipal inspection.....	30			1					5				270		7	2
Total.....	30		1	1					9				274		7	2
Humacao:																
Insular inspection.....	5		3		1				7		1	2	145		6	5
Municipal inspection.....	123				51		4	6	36		1	2	1,087		374	42
Total.....	13		3		52		4	6	43		2	4	1,232		380	47

accomplished in each municipality by insular and municipal inspectors, respectively, fortnightly reports—Continued.

Measures.				Miscellaneous.				Total.				Packages.							
Liquid.		Linear.																	
Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Heavy.	Correct.	Light.					
244	.....	.....	26	107	.....	.....	9	34	.....	.....	.....	1,159	.....	254	38	.....	.....	14	.....
244	.....	.....	26	107	.....	.....	9	34	.....	.....	.....	1,159	.....	254	38	.....	.....	14	.....
11	.....	.....	.....	2	.....	.....	1	.....	.....	.....	.....	41	.....	19	1	5	.....	1	25
247	.....	.....	.....	43	.....	.....	.....	.....	.....	.....	.....	1,340	.....	19	15	4	.....	57	38
258	.....	.....	.....	45	.....	.....	1	.....	.....	.....	.....	1,381	.....	38	16	9	.....	58	63
162	.....	5	1	35	.....	.....	12	3	.....	.....	1	1,471	.....	279	61	55	.....	69	76
	.....	.....	.....	21	.....	1	.....	1	.....	.....	.....	53	.....	1	19	19	.....	600	190
162	.....	5	1	53	.....	1	12	4	.....	.....	1	1,524	.....	290	61	63	.....	639	266
22	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	62	.....	3	.....	38	.....	101	.....
94	.....	.....	.....	40	.....	.....	.....	.....	.....	.....	.....	817	.....	1	.....	1	.....	677	.....
116	.....	1	.....	40	.....	.....	.....	.....	.....	.....	.....	879	.....	4	.....	39	.....	778	.....
2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	59	.....	.....	10	55	.....	69	76
185	.....	.....	.....	44	.....	.....	4	.....	.....	.....	.....	771	.....	23	37	259	.....	712	62
187	.....	.....	1	44	.....	.....	4	.....	.....	.....	.....	830	.....	23	47	314	.....	781	138
67	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	115	6	5	4	.....	.....	.....	.....
71	.....	.....	5	58	.....	4	3	4	.....	.....	.....	921	.....	252	30	928	.....	1,273	263
138	.....	2	5	58	.....	4	3	4	.....	.....	.....	1,036	6	257	34	928	.....	1,273	263
113	.....	5	38	1	.....	.....	1	1	.....	.....	.....	875	.....	64	186	16	.....	84	14
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	159	.....
113	.....	5	38	1	.....	.....	1	1	.....	.....	.....	875	.....	64	186	19	.....	243	14
194	.....	1	10	56	.....	.....	4	.....	.....	.....	.....	1,113	.....	178	78	29	.....	71	18
194	.....	1	10	56	.....	.....	4	.....	.....	.....	.....	1,113	.....	178	78	29	.....	71	18
231	.....	.....	6	77	.....	.....	12	31	.....	.....	.....	1,310	.....	309	43	.....	.....	25	.....
17	.....	.....	.....	4	.....	.....	.....	2	.....	.....	.....	65	.....	16	2	.....	.....	1,264	.....
248	.....	.....	6	81	.....	.....	12	34	.....	.....	.....	1,375	.....	325	45	.....	.....	1,289	.....
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	1	.....	7	.....	15	.....
27	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	339	.....	7	3	13	.....	4,997	.....
29	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	349	.....	8	3	20	.....	5,012	.....
38	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	197	.....	10	10	.....	.....	.....	.....
4	.....	109	3	7	.....	.....	2	.....	.....	.....	.....	1,314	.....	488	55	53	.....	30	3
42	.....	109	6	8	.....	.....	2	.....	.....	.....	.....	1,511	.....	498	65	53	.....	30	3

STATEMENT No. 15.—*Bureau of Weights and Measures—Table showing work according to daily and*

Towns.	Scales.												Weights.			
	Counter.				Spring.				Platform.							
	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.
Isabela:																
Insular inspection.....	7							11					72		4	7
Municipal inspection.....	129				2		1	60		1			629		578	12
Total.....	136				2		1	71		1			701		582	19
Jayuya:																
Insular inspection.....	73	11	1	7			1	16		4			622		348	40
Municipal inspection.....	3	1						3					25			34
Total.....	76	12	1	7			1	19		4			647		348	74
Juana Diaz:																
Insular inspection.....	113	8	6	12		3		28		9			753		382	35
Municipal inspection.....																
Total.....	113	8	6	12		3		28		9			753		382	35
Juncos:																
Insular inspection.....	60			20		2	36		4	1			420		223	19
Municipal inspection.....	8			1	2		1	10		1			356	5	7	2
Total.....	68			21	2		3	46		5	1		776	5	230	21
Lajas:																
Insular inspection.....	93	1	1					13		1	1		673	35	154	35
Municipal inspection.....	18							1					161		18	9
Total.....	111	1	1					14		1	1		837	36	172	44
Lares:																
Insular inspection.....	75	1		8		2	37		8				643		188	15
Municipal inspection.....	47			11		2	1	16		1			542		166	13
Total.....	122	1		19		4	1	53		9			1,185		354	28
Las Marias:																
Insular inspection.....	81	1		9				15		1	1		570		136	30
Municipal inspection.....	25	1	2	2			1	9		3			366		152	28
Total.....	106	2	2	11			1	24		4	1		936		288	58
Las Piedras:																
Insular inspection.....	46		2	142		1		8								3
Municipal inspection.....																
Total.....	46		2	142		1		8					289		86	3
Loiza:																
Insular inspection.....	35			4				11		3	1		394		80	13
Municipal inspection.....	2			1									47			
Total.....	37			5				11		3	1		441		80	13
Luquillo:																
Insular inspection.....	31	2		10		1	1	5			1		292		97	6
Municipal inspection.....																
Total.....	31	2		10		1	1	5			1		292		97	6
Manati:																
Insular inspection.....	48	2	1										283		125	76
Municipal inspection.....	136	2	1	9				31					1,244		388	39
Total.....	184	4	2	9				31					1,527		513	115

accomplished in each municipality by insular and municipal inspectors, respectively, fortnightly reports—Continued.

Measures.								Miscellaneous.				Total.				Packages.		
Liquid.				Linear.														
Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Heavy.	Correct.	Light.
21			1	3								114		4	8	1	47	2
295				103								1,218		590	12	35	3,829	35
316			1	106								1,332		584	20	36	3,876	37
152			6	9			3					879		363	51	1	269	
												31		1	34	5	509	3
152			6	9			3					910		364	85	6	778	3
311	8	3		72			1	4				1,293		410	45		105	4
311	8	3		72			1	4				1,293		410	45		105	4
129			14	46			6					711		227	42		200	
			2	22								397	7	8	5	8	34	
129			16	68			6					1,108	7	235	47	8	234	
109				17								905	36	156	37	91	352	2
				4								187		18	9	251	1,658	87
109				21								1,092	36	174	46	342	2,010	89
144			3	25		6						932		205	18			
84				2				2				704		169	14	165	1,151	60
228			3	27		6		2				1,636		374	32	165	1,151	60
109	1	1		3								787		139	32		150	10
54		2		5								461		156	33	116	439	39
163	1	3		8								1,248		295	65	116	589	49
49				14			2					548		87	7	37	19	40
																23	1,633	15
49				14			2					548		87	7	60	1,652	55
145			3	27								616		83	17	1	14	5
36				7								83				31	195	1
171			3	34								699		83	17	32	209	6
87				11			3					436		100	11	28	38	12
																4	1,300	
87				11			3					436		100	11	32	1,338	12
129	6			1								461		133	77		1	1
229				33								1,682		390	40	800	2,623	4
358	6			34								2,143		523	117	800	2,624	5

STATEMENT No. 15.—Bureau of Weights and Measures—Table showing work according to daily and

Towns.	Scales.												Weights.				
	Counter.				Spring.				Platform.				Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	
	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.					
Maricao:																	
Insular inspection	29								1					189		57	
Municipal inspection	53				1		1		16					521	14	18	
Total	82				1		1		17					710	14	75	
Mamabo:																	
Insular inspection																	
Municipal inspection	59				17			4	17		1			50		293	6
Total	59				17			4	17		1			503		293	6
Mayaguez:																	
Insular inspection	179	10	7	6					32		1		1,486		412	122	
Municipal inspection	370	7	5	69			8	5	185		25		4,126		908	24	
Total	549	17	12	75			8	5	217		26		5,612		1,320	146	
Moca:																	
Insular inspection	68	5	1	5		1			6				433		152	56	
Municipal inspection	20							1					267		9	6	
Total	88	5	1	5		1	1		6				710		161	62	
Morovis:																	
Insular inspection	55	7	1	9					9		4		602		191	26	
Municipal inspection																	
Total	55	7	1	9					9		4		602		191	26	
Naguabo:																	
Insular inspection									2				2				
Municipal inspection	92				37			4	16		1		780		11	9	
Total	92				37			4	18		1		782		11	9	
Naranjito:																	
Insular inspection	37	5	1	28					5				360		109	7	
Municipal inspection																	
Total	37	5	1	28					5				360		109	7	
Patillas:																	
Insular inspection	178	5	3	16		1	1		37		7		1,865		450	29	
Municipal inspection																	
Total	178	5	3	16		1	1		37		7		1,865		450	29	
Pefuñuelas:																	
Insular inspection	80	1	2	3					13		2		409		29	301	
Municipal inspection																	
Total	80	1	2	3					13		2		409		29	301	
Ponce:																	
Insular inspection	27	14	1						5	3	3		800		39	130	
Municipal inspection	480	30	7	201		7	4		230	28	6		7,230		712	164	
Total	507	44	8	201		7	4		235	31	6		8,030		751	294	
Quebradillas:																	
Insular inspection	94	9		1					9	7			695		260	28	
Municipal inspection	126	1	2						9	5	1		1,144		57	32	
Total	220	10	2	1					18	12	1		1,839		317	60	

accomplished in each municipality by insular and municipal inspectors, respectively, fortnightly reports—Continued.

Measures.				Miscellaneous.				Total.				Packages.		
Liquid.				Linear.										
Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Heavy.	Correct.	Light.
66			7					292		57		10	53	
152			23					928	14	19		117	6,150	72
218			30					1,220	14	76		127	6,203	72
86		1	35			12		720		294	23	5,064	5,220	3,142
89		1	35			12		720		294	23	5,064	5,220	3,142
955	31	12	4					2,666		455	141	263	1,881	67
1,725	10	56	800			1		7,275		959	90	524	20,064	39
2,680	41	68	804			1		9,941		1,414	231	797	21,955	106
108	2	3	4					624		160	60		71	
								297		9	7	74	1,601	
108	2	3	4					921		169	67	74	1,672	
198		5	46			11	62	951		202	45		51	
168		5	46			11	62	951		202	45		51	
61			52					4				114	156	33
								1,038		11	14	3,236	5,129	319
61			52					1,042		11	14	3,350	5,285	352
132		11	35			3	69	666		114	23		40	
132		11	35			3	69	666		114	23		40	
246		2	44			1		2,386		463	36	35	21	28
246		2	44			1		2,386		463	36	35	21	28
112		6	14			1		631		32	310		397	3
112		6	14			1		631		32	310		397	
573	35							1,405	3	91	131	16	129	5
1,589		2	3,166		61	21,022	7	13,918		845	185	319	42,752	299
2,162	35	2	3,166		61	21,022	7	15,323	3	936	316	335	42,881	294
257	4	23	80		1	2		1,166		281	53		12	
349		1	114			1		1,742		63	46		483	
636	4	33	194		1	8		2,908		341	99		495	



STATEMENT NO. 15.—*Bureau of Weights and Measures—Table showing work according to daily and*

Towns.	Scales.												Weights.			
	Counter.				Spring.				Platform.							
	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.
Rincón:																
Insular inspection.....	11								5				66		24	1
Municipal inspection.....	37		3		5		2		3	2			413	1	19	5
Total.....	48		3		5		2		8	2			479	1	43	6
Río Grande:																
Insular inspection.....	81		3	2	28			2	12		2		804		161	47
Municipal inspection.....																
Total.....	81		3	2	28			2	12		2		804		161	47
Río Piedras:																
Insular inspection.....	3												23			
Municipal inspection.....	36	61	25	1	12	34	15	3	6	26	14	1	463	463	513	60
Total.....	39	61	25	1	12	34	15	3	6	26	14	1	486	463	513	60
Sabana Grande:																
Insular inspection.....	65		5	1	8	2		2	9	3	1		567		318	17
Municipal inspection.....	27				1								234			
Total.....	92		5	1	9	2		2	9	3	1		801		318	17
Salinas:																
Insular inspection.....	88		2	4	8			1	22		3	1	598		12	237
Municipal inspection.....	1							3	2				13			8
Total.....	89		2	4	8			4	24		3	1	611		12	245
San Germán:																
Insular inspection.....	199	3	1	1	13				36	10	5		1,484	294	583	54
Municipal inspection.....	40								3				86			
Total.....	239	3	1	1	13				39	10	5		1,570	294	583	54
San Juan:																
Insular inspection.....	136		33	5	179		35	18	186		38	1	7,583		850	80
Municipal inspection.....	277	23	22	5	185		37	4	158	1	36	1	5,977		623	187
Total.....	413	23	55	10	364		72	22	344	1	74	2	13,560		1,473	267
San Lorenzo:																
Insular inspection.....	123		11		12				26		5		1,182		50 <sup>a</sup>	36
Municipal inspection.....																
Total.....	123		11		12				26		5		1,182		50 <sup>a</sup>	36
San Sebastian:																
Insular inspection.....	140		21	2	2		2		20		3	1	94 <sup>a</sup>		50 <sup>a</sup>	142
Municipal inspection.....	10								6				231			
Total.....	150		21	2	2		2		26		3	1	1,179		50 <sup>a</sup>	142
Santa Isabel:																
Insular inspection.....	1									6			29			4
Municipal inspection.....	72		1	3	8				20		4		415		29	16
Total.....	73		1	3	8				20	6	4		444		29	20
Toa Alta:																
Insular inspection.....	54		6	1	14				13	6			525		197	24
Municipal inspection.....																
Total.....	54		6	1	14				13	6			525		197	24

accomplished in each municipality by insular and municipal inspectors, respectively, fortnightly reports—Continued.

Measures.				Miscellaneous.				Total.				Packages.		
Liquid.		Linear.												
Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Heavy.	Correct.	Light.
19			2	2				103		24	3		14	
35				10				503	3	24	5		368	
54			2	12				606	3	48	8		382	
244				20		6		1,189		176	57	24	35	7
												65	520	24
244				20		6		1,189		176	57	89	555	31
75	173	2		8			3	37				47	380	36
				209	32		21	822	815	569	76	599	3,169	39
75	173	2		217	32		24	859	815	569	76	646	3,519	75
88				27		2		764	5	324	22	88	253	
34				2				298				780	7,288	378
122				29		2		1,062	5	324	22	848	7,541	378
157		3	3	26		1	6	899		21	252	3	361	7
								16			11	166	378	15
157		3	3	26		1	6	915		21	263	109	739	22
214		19	17	63			4	2,043	307	608	72	120	1,164	22
								129				119	4,739	94
241		19	17	63			4	2,172	307	608	72	239	5,903	116
802		8	119	720		4	10	9,683		979	233	343	5,536	370
2,231		386	52	1,990		4	1,680	12,528	24	1,346	379	95	322	55
3,123		394	171	2,710		4	14	22,211	24	2,325	612	436	5,853	425
267			18	76		3	44	1,686		527	98	25	189	39
												15	54	
267			18	76		3	44	1,686		527	98	40	243	39
208		4	9	21		1	1	1,339		539	155		24	2
20								267				33	1,393	100
228		4	9	21		1	1	1,606		539	155	33	1,417	102
8			1					38	6		5	4	406	6
140			2	4			1	659		34	22	806	4,841	234
148			3	4			1	697	6	34	27	810	5,247	240
108		3		33		3		747	6	209	25		15	
108		3		33		3		747	6	209	25		15	

STATEMENT No. 15.—Bureau of Weights and Measures—Table showing work according to daily and

Towns.	Scales.												Weights.			
	Counter.				Spring.				Platform.							
	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.
Toa Baja:																
Insular inspection . . . . .	42			2	5		1		10		2		407		32	12
Municipal inspection . . . . .																
Total . . . . .	42			2	5		1		10		2		407		32	12
Trujillo Alto:																
Insular inspection . . . . .	43		2	1	9				9			2	383		158	4
Municipal inspection . . . . .					1				1				27			
Total . . . . .	43		2	1	10				10			2	410		158	4
Utua:																
Insular inspection . . . . .	59		13		2		1	42		6			628		170	51
Municipal inspection . . . . .	75	18	8		9			25	5				743	172	110	
Total . . . . .	134	18	21		11			1	67	5	6		1,371	172	280	51
Vega Alta:																
Insular inspection . . . . .	36		1		12			1	5		1		247		32	75
Municipal inspection . . . . .																
Total . . . . .	36		1		12			1	5		1		247		32	75
Vega Baja:																
Insular inspection . . . . .	59		8	3	15				25				483		221	229
Municipal inspection . . . . .																
Total . . . . .	59		8	3	15				25				483		221	229
Vieques:																
Insular inspection . . . . .	82		4		18			1	55		12		908		94	3
Municipal inspection . . . . .	1			2				4	2				17			3
Total . . . . .	83		4	2	18			5	57		12		925		94	6
Villalba:																
Insular inspection . . . . .	57		7	4	26		5	3	32		5		547		412	20
Municipal inspection . . . . .																
Total . . . . .	57		7	4	26		5	3	32		5		547		412	20
Yabucoa:																
Insular inspection . . . . .	3								2				76			21
Municipal inspection . . . . .	91		1		8				23				795		368	16
Total . . . . .	94		1		8				25				871		368	37
Yauco:																
Insular inspection . . . . .	169		7	1	7		1	1	53		4	1	1,364		396	262
Municipal inspection . . . . .	20				1				10				414	5	31	80
Total . . . . .	189		7	1	8		1	1	63		4	1	1,778	5	427	342
Total packages reweighed by Insular police . . . . .																
Total . . . . .	8,637	111	510		164	1,846	40	181	116	2,792	88	459	36,322	160	1,130	21,599

accomplished in each municipality by insular and municipal inspectors, respectively, fortnightly reports—Continued.

Measures.								Miscellaneous. <sup>1</sup>				Total.				Packages.		
Liquid.				Linear.														
Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Correct.	Corrected.	Condemned for repairs.	Condemned and confiscated.	Heavy.	Correct.	Light.
83			3	20			1		573		35	18				1 11	10 40	2
89			3	20			1		573		35	18				12	50	2
150			1	34			10		628 29		160	18				1 3	119 83	1
153			1	34			10		657		160	18				4	202	1
131		2	1	22		3	2		884		194	64					36	
180				46					1,078	195	118					276	1,761	14
311		2	1	68		3	2		1,962	195	312	64				276	1,797	14
61				13					374		34	76					183 465	3 13
61				13					374		34	76					648	16
90		3		19		1	1		691		233	233				20 186	647 588	8 77
90		3		19		1	1		691		233	233				216	1,235	85
237			1	52			15		1,352 21		110	20 9				84 591	18 830	41
237			1	53			15		1,373		110	29				675	848	41
322			23	22		1	7		1,006		430	57					155	
322			23	22		1	7		1,006		430	57					155	
18 78		2							99		2	21				27	6	
			6	33			8		1,028		369	30				353	2,499	27
96		2	6	33			8		1,127		371	51				390	2,505	27
372 19		23	37	53 29		3	1	2	2,020 503		434 5	303 80				12 468	232 3,638	3 436
301		23	37	92		3	1	2	2,523	5	465	383				490	3,870	439
																900	6,206	387
23,220	173	727	735	11,148	32	122	404	3,459	26	262	841	43,312	1,600	23,860	6,538	34,291	205,809	11,206

STATEMENT 16.—*Bureau of supplies, printing, and transportation—Balance sheet June 30, 1918.*

ASSETS.		LIABILITIES.	
Property.....	\$65,845.60	Investment.....	\$121,022.76
Printing division.....	\$52,441.80	Appropriation.....	25,000.00
Transportation division.....	8,605.65	Collections refundable.....	296.37
Furniture and fixtures.....	4,140.04	Accounts payable.....	44,374.83
Equipment.....	658.11	United States invoices.....	\$23,197.24
		Local invoices.....	21,177.49
Funds.....	4,121.56	Audited vouchers and pay rolls, controlling account.....	1,021.83
Treasurer of Porto Rico.....	4,121.56	Suspense, accounts payable.....	62.37
Merchandise—Inventory.....	50,331.63	Reserve for purchases and renewals.....	10,355.72
Material and supplies.....	34,908.14	Printing division.....	\$4,898.79
Transportation division supplies.....	3,108.53	Transportation division.....	5,458.83
Purchases in transit.....	12,316.96		
Accounts receivable, controlling accounts.....	68,494.52		
Suspense, accounts receivable.....	1,761.00		
Work in progress, controlling account.....	8,592.74		
Revised statutes and codes of Porto Rico.....	299.00		
Goods returned or lost.....	42.00		
Unearned insurance premium.....	511.47		
Building.....	1,858.76		
Live stock.....	275.00		
Post office department (deposit for letter-box keys).....	.60		
Total.....	202,133.88	Total.....	202,133.88

STATEMENT 17.—*Bureau of supplies, printing, and transportation—Supplementary statement of general ledger accounts June 30, 1918.*

MERCHANDISE.	
Balance on hand May 31, 1918.....	\$31,606.94
Charges during June.....	70,894.37
Printing division work for stock.....	371.30
Insurance charges.....	12.79
Surplus from inventory.....	765.61
Issues on requisitions, material and supplies.....	\$49,821.23
Issues, printing jobs.....	2,583.06
Printing division, administrative department.....	67.15
Office requisitions, expense.....	111.79
Transportation division, auto service.....	681.46
Truck, delivery service.....	44.00
Special disbursing officer.....	10.70
Balance.....	50,331.63
Stock on hand.....	\$38,014.67
Purchases in transit.....	12,316.96
	103,651.01 103,651.01
PRINTING DIVISION	
	Stock. Labor charges.
Work in progress May 31, 1918.....	\$3,301.18 \$7,067.19
Charges for month.....	2,555.77 2,796.92
	5,856.95 9,864.11
Finished jobs during June.....	2,965.54 4,162.81
	2,891.44 5,701.30
Work in progress June 30, 1918.....	2,891.44
Total.....	8,592.74
AUDITED VOUCHERS AND PAY ROLLS.	
Vouchers unpaid to May 31.....	64,359.97
Vouchers registered in June.....	43,878.12
Vouchers paid during June.....	\$105,715.00
Vouchers paid in May, taken up in June.....	1,501.26
Unpaid vouchers to June 30.....	1,021.83
Total.....	108,238.09 108,238.09

**STATEMENT 17.—Bureau of supplies, printing, and transportation—Supplementary statement of general ledger accounts June 30, 1918—Continued**

**ACCOUNTS RECEIVABLE.**

Outstanding May 31, 1918.....		\$169,506.63
Departments.....	\$164,410.43	
Others.....	5,096.20	
Charges for month, net.....		59,485.72
Departments.....	56,349.57	
Other.....	3,136.15	
Repayments for month.....		\$160,019.51
Departments.....	158,572.11	35.10
Other.....	1,437.50	
Special disbursing officer.....		71.92
Bureau of supplies, printing, and transportation.....		371.30
Balance June 30, 1918.....		68,494.52
Departments.....	61,744.67	
Other.....	6,741.85	

**ACCOUNTS PAYABLE.**

United States invoices unpaid May 31, 1918.....		16,402.71
United States invoices registered in June.....		16,792.43
Local invoices.....		65,060.41
United States invoices paid in June.....	9,779.44	
Local invoices vouchered in June.....	43,882.92	
United States invoices canceled, June.....	218.36	
United States invoices unpaid to June 30.....	23,197.34	
Local invoices unpaid to June 30.....	21,177.49	
Total.....	98,255.55	98,255.55

**STATEMENT 18.—Bureau of supplies, printing, and transportation—Statement for fiscal year 1917-18.**

**PURCHASES AND SALES.**

**ASSETS.**

Inventory, June 30, 1917.....		\$72,278.16
Material and supplies.....	\$48,450.12	
Transportation division supplies.....	5,345.15	
Purchases in transit.....	9,476.18	
Revised Statutes and Codes of Porto Rico.....	299.00	
Work in progress, printing division.....	8,707.71	
Deduct inventory, June 30, 1918.....		59,223.37
Material and supplies.....	34,908.14	
Transportation division supplies.....	3,106.53	
Purchases in transit.....	12,316.96	
Revised Statutes and Codes of Porto Rico.....	299.00	
Work in progress, printing division.....	8,592.74	

**PURCHASES, SALES ACCOUNT.**

United States.....	\$152,362.54	
Freight, crating, and insurance.....	13,728.94	
Local.....	665,383.64	166,091.48
Freight, crating, and insurance.....	7,600.22	
Total purchases.....	672,963.86	
Printing division, output.....	71,173.68	839,075.34
Less cost of stock.....	31,606.38	
Transportation division earnings.....		39,567.30
Delivery service earnings.....		18,564.85
Printing of municipal forms, books, etc., for stock.....		245.49
Surcharge and United States discounts billed.....		5,563.51
Insurance on stock.....		403.17
Surplus from inventory.....		89.25
Material and supplies.....	753.62	765.61
Transportation division.....	11.99	
Total.....		917,329.31

STATEMENT 18.—*Bureau of supplies, printing, and transportation—Statement for fiscal year 1917-18—Continued.*

## LIABILITIES.

Total sales for year.....	\$906,508.79
Less corrections and deductions.....	1,677.01
Net sales for the year.....	\$904,831.78
Supplies used by divisions as under.....	12,497.63
Transportation division.....	9,318.33
Printing division, administration.....	1,699.44
Bureau office, paid from contingent expenses.....	1,028.17
Delivery service.....	377.29
Property account.....	4.30
Total.....	917,329.31

STATEMENT 19.—*Bureau of supplies, printing, and transportation—Printing division, fiscal year 1917-18.*

COSTS.		OUTPUT.	
Material used on jobs:		Composing room.....	\$20,630.37
Pressroom.....	\$29,923.25	Pressroom.....	36,878.19
Bindery.....	1,683.18	Bindery.....	11,178.93
	\$31,606.38		
Wages:			68,688.49
Composing room.....	19,013.07	Added for purchases and renewals.....	2,485.19
Pressroom.....	5,623.55		
Bindery.....	9,126.08		
	33,777.70		
Power and light:			
Composing room.....	463.69		
Pressroom.....	589.66		
Bindery.....	127.56		
	1,180.91		
Fuel gas: Bindery.....	51.12		
	51.12		
Gasoline:			
Composing room.....	644.08		
Pressroom.....	188.43		
	832.51		
Oil, waste, and grease:			
Composing room.....	36.44		
Pressroom.....	88.86		
Bindery.....	22.98		
	127.69		
Water:			
Composing room.....	45.88		
Pressroom.....	23.04		
Bindery.....	22.98		
	91.90		
Proof paper, jackets, and stationery for administrative division:			
Composing room.....	162.97		
Pressroom.....	154.67		
Bindery.....	86.73		
	404.37		
Insurance on machinery and tools:			
Composing room.....	91.23		
Pressroom.....	40.58		
Bindery.....	23.23		
	155.04		
Repairs and maintenance:			
Composing room.....	76.91		
Pressroom.....	227.79		
Bindery.....	30.17		
	334.87		
Towel service.....	54.00		
Telephone service.....	72.00		
	68,688.49		
Added charge for purchases and renewals	2,485.19		
	71,173.68		71,173.68

## STATEMENT 20.—Bureau of supplies, printing, and transportation—Transportation division, fiscal year 1917-18.

COSTS.		AUTO SERVICE.		EARNINGS.	
Wages.....	\$4,220.01	138,127 kilometers.....	\$18,004.87		
Gasoline.....	3,726.80	Sale of old tires and tubes.....	434.98		
Oil, waste, and grease.....	287.88	Labor on department cars, billed.....	125.50		
Materials for repairs.....	992.61				
Material for equipment.....	4,210.97				
Chauffeurs, per diem.....	1,196.64				
Water.....	174.66				
Power and light.....	7.20				
Insurance on cars.....	60.01				
Office stationery and supplies.....	90.27				
Telephone service.....	72.80				
Expressage and hauling.....	2.00				
	15,061.65				
Added for purchases and renewals.....	3,387.70				
Labor on department cars.....	125.50				
	18,564.85				18,564.85
		DELIVERY SERVICE.			
Wages.....	\$145.51	Amount of charges distributed.....	\$245.40		
Gasoline.....	82.26				
Oil, waste, and grease.....	7.38				
Insurance on truck.....	2.34				
Chauffeur, per diem.....	2.00				
	245.49				245.40





### APPENDIX III.

## REPORT OF THE COMMISSIONER OF HEALTH.

OFFICE OF THE COMMISSIONER OF HEALTH,  
San Juan, P. R., July 1, 1918.

Hon. ARTHUR YAGER,  
*Governor of Porto Rico, San Juan, P. R.*

SIR: I have the honor to submit the annual report of the department of health for the fiscal year 1917-18.

The said report shows all action, duly explained, taken by the different bureaus and divisions of the department of health; the new organization of a corps of health inspectors in such number that no locality, however small, is deprived of the services of one of these officers, who constitute an indispensable factor in efficiently complying with the regulations for the protection of public health; vital sanitary statistics; the clinical and administrative activities of hospitals and sanatoriums under the control of the department, and all matters relating to insular charities, also under the department's control, in accordance with the organic act and the provisions of joint resolution No. 7, passed by the Legislature of Porto Rico, approved November 9, 1917, which provides for the assignment of the charity schools of Santurce to the department of health.

Upon his induction into the very important office intrusted to him, the writer could not do otherwise than figure out a plan for the solution of the most serious and urgent hygienic problems, and especially a plan in harmony with a well-established and scientific sanitary organization, all the efforts of which are to be directed toward reaching three fundamental objectives—the increase of the birth rate, decrease of the death rate, and the attainment of the greatest possible longevity within the limits established by nature to human existence.

The writer's attention was especially attracted to the enormous average of total deaths—28.5 in 1,000 for the fiscal year 1916-17—and to the very high partial averages due to diseases derived from human foci, which are wholly preventable if the morbid and surrounding conditions determining them are established by the statistical study of those having the largest coefficient, which were found to be as follows: Infantile mortality, representing 47.82 per cent of the general death rate; tuberculosis, 7.38 per cent; paludism, 5.54 per cent; and uncinariasis, 1.26 per cent, making 62 per cent of the total death rate, and leaving a balance of but 38 per cent for the remaining diseases, numbering 189, distributed in accordance with Bertillon's classification.

The possession and knowledge of such statistical data were sufficient basis for the conception of a sanitary plan which was to develop into an intensive systematic campaign of a permanent character against those factors of death. This plan was summarized in a circular addressed to the officers of the department of health, dated October 1, 1917.

The circular referred to pointed out a necessity which at the time required, and still requires, satisfaction—knowledge of the medical geography of the island, which is the only scientific course toward the solution of the complex endemo-epidemic problems of Porto Rico. Such a medical geography must be established by means of topographic charts of the different municipal jurisdictions and of those wards where the same may be necessary, in order to act intelligently and conscientiously against transmissible diseases, very especially against paludism, since such map will show the malarial zones most afflicted by the agents causing the disease. In regard to diseases of a hydric nature, or, in other words, those transmitted by potable water, said maps will show the centers of infection from time to time existing in coast and interior towns.

To complete this geographical task it is recommended that a study be made of the animal vehicles of infection. This study should be made in number or by species, since medical entomology is the basis of etiology and transmissibility of the morbid parasite.

Special reference was made to the suburb of Puerta de Tierra of the city of San Juan for the reason that it constitutes a permanent focus of insalubrity. This explains its sad privilege of having been the point of origin or commencement of the epidemics developed in the past six years.

Very important improvements and sanitary work are at present being carried out in the aforesaid suburb, among which works is the removal of 404 houses from the places called "Salsipuedes" and "Hoyo Frio" to another temporary site, while a well-studied and well-conceived plan of urbanization is being prepared.

The great and awful problem of infantile mortality has been, is, and will be the object of most especial attention. Although such problem depends upon multiple causes, to be analyzed in this report, it is infinitely connected with the supply of fresh cows' milk, since this is, in lieu of mother's milk, the only food administered during the first year of infancy. Cows' milk is at the same time one of the greatest conveyors of the morbid agents of the nosological entity that causes the death of the largest number of children—enteritis.

To insure the success of the campaign against the aforesaid mortality scrupulous compliance with each and every provision of sanitary regulation No. 28, relative to dairies, depots, and the sale of fresh milk, was absolutely indispensable. To this end the respective officers were ordered to make a general inspection of the establishments above mentioned throughout the island, correction of the deficiencies and infractions observed having been ordered in peremptory periods of time.

It was so done, but scarcity of the product and its consequent high price, ranging from 16 to 17 and 18 cents a liter, placed it beyond the reach of the proletariat, who were obliged to feed their children other inadequate substitute, which increased the coefficient of infantile mortality. This circumstance, added to the general circumstances of the present world catastrophe, and concurring with requests of the food commission, caused the insular board of health to draft a temporary emergency regulation relative to milk, attenuating the provisions and rigor of certain precepts in order to increase production, a result undoubtedly brought about by the change of seasons. Although painful to record, these steps did not cause a drop in the cost of milk nor a decrease in the number of deaths due to infantile enteritis.

The universal problem of tuberculosis, which is medical, economic, and social, was a subject of preferred recommendation in the aforesaid document, especially when we know, as we do, that in Porto Rico no antituberculosis campaign has been started on a basis of scientific and imperative prophylaxis, which in our island is timid, poor, and deficient, not to say negative. Hence the publication by this department of a pamphlet containing precepts of popular education on tuberculosis, issued for the purpose of converting children into convinced phthisiophobiacs with a knowledge of the preventability and curability of the disease.

And as the dispensary is and always will be the most solid basis of the struggle against the white plague, the commissioner's first idea was to establish them in different localities where the powerful aid of visiting nurses could be used in classifying tuberculosis patients for the purpose of sending them to sanatoriums or hospitals as circumstances might require.

The three elements mentioned—dispensary, hospital, and sanatorium—have not reached the degree of effectiveness desired because of reasons which will be set forth in the proper place in this report.

The only recommendation made in this respect is condensed in the necessity of appropriating \$100,000 in the next budget framed, since the commissioner is convinced, as we all should be, of the fact that under haggled and low appropriations real and positive victories in the rude struggle against tuberculosis will never be achieved, but that instead we shall lapse into the sterility of routine or be doomed to the most lamentable failure.

In regard to paludism a well-laid and well-defined plan was recommended. This plan comprised general, uniform, rapid, and effective measures for the discovery of malarial focuses by means of registries of patients, examination of the spleens of school children (especially in rural schools), and hematologic investigation of mosquitoes so as to obtain an index of endemicity rendering future statistics exact.

The campaign against paludism, carried on by means of dispensaries, hospitals, and home attendance, should be and is, wherever possible, of the general character corresponding to the distribution and other manifestations of the disease. In other words, action and energy should be divided and subdivided so as to be efficacious, since up to a recent date the antimalarial struggle has received the greatest impulse, and has therefore attained the greatest success, in the vicinity of urban centers, when it should have been pushed, as is now being done, in the rural districts, thus affording them the benefits of the campaign.

An intensive culicidal campaign has been simultaneously carried on, the people, adults and children, being at the same time taught that every case of malaria constitutes a source of danger to the community and that prophylaxis is summarized in the few words—isolation and treatment of patients; cinchonization of the healthy.

And in regard to paludism, it is pertinent, Governor, to make a recommendation similar to that made in connection with tuberculosis: An appropriation of not less than \$50,000 in the next budget, for maintenance of the malaria hospital at Guayama, reopening of the one at Barceloneta, and the establishment of a central dispensary and as many secondary ones as may be necessary, all of them to be well provided with arsenical and ferruginous quinine salts and with a sufficient quantity of oil for the methodical and permanent petrolization of all mosquito-breeding places.

We could not, should not, forget the integral restitution of the anemia (uncinariasis) service, though with such modifications as experience prompts not only for the cure of the disease, but for what is still more interesting, its prevention, accompanied by a conscientious clinical study of the general syndrome and of the more or less intensive modalities of the disease. To this end we must procure, besides dispensary attendance, the confinement in hospitals, in those localities most afflicted with the disease, of the greatest number possible of patients suffering from uncinariasis, who will become real examples of the result of treatment. One of these patients treated and cured in a hospital means more to his neighbors than all the drugs that can be administered, and in their conviction they admire the benefits of this sanitary work which brings about individual and collective improvement of the Porto Rican country man and produces vigorous and robust men who increase human social capital.

The impulse given to the eradication of uncinariasis by the department of health during the last few months has been extraordinary. At the present time 27 anemia stations are functioning with complete regularity and giving highly satisfactory results. In order to continue the benefits derived therefrom, the commissioner makes this last recommendation, that there be appropriated in the budget previously mentioned the sum of \$50,000 for maintenance of the stations already established, those that may be established in future, and for that of a malaria hospital in Utuado first and of another later on in Lares.

Before closing this communication it is in all respects pertinent to mention a project which should be submitted to the consideration of the next legislature: The establishment of compulsory disease insurance, considered in Europe as well as in America as the only factor making in other countries for healthy and strong peoples. It should not therefore be reduced to a purpose, but this crystalizable objective should be converted into a living reality, the first result of which must necessarily be a decrease in Porto Rico's excessive death rate.

Visiting nurses will be the object of special organization within the department in connection with infantile mortality and tuberculosis.

The principal function of these female devotees of hygiene is prevention, prophylaxis of transmissible diseases, and above all of tuberculosis, in which field they have achieved such brilliant success that at present there are in the United States over 6,000 visiting nurses, the greatest part of whom are connected with the anti-tuberculosis fight, having caused a notable decrease of the coefficient of mortality due to the disease.

We must bear the present greatly in mind without forgetting the future, since it will then be very difficult, if not impossible, to cover all the deficits caused by the world catastrophe, none of which will demand greater energy than the battle against tuberculosis which disease, the war once over, will develop to an alarming degree. It already constitutes a danger in the ranks of the armies, and will constitute the same danger to the peoples when the discharge of soldiers spread the same.

The department of health is fully conscious of all these responsibilities, and with the aid of your valuable influence, such appropriations as the legislature may make for it, and the support of all Porto Ricans, it expects to comply with its duty.

Respectfully,

A. RUIZ SOLER,  
*Commissioner of Health.*

#### ORGANIZATION OF THE DEPARTMENT OF HEALTH OF PORTO RICO.

It is not out of place in this report, but quite timely, to make known the organization of the department of health, known up to March 2 of last year, when the Jones Act took effect, as the "sanitation service of Porto Rico."

Section 1 of the sanitation law approved March 14, 1912, provides that the service shall consist of an insular board of health in the capacity of a consulting and legislative body; of a director of sanitation having executive powers; of an assistant director, and the personnel necessary in the various offices authorized by law.

Both bodies are autonomous, but each is the complement of the other, and both tend to the same end, "the preservation of public health in Porto Rico."

The present insular board of health is composed of the following persons, who enjoy merited prestige in the community:

Dr. Francisco del Valle Atilas, chairman.  
 Dr. Gustavo Muñoz Díaz, medical member.  
 Dr. José S. Belaval, medical member.  
 Dr. José López Antongiorgi, medical member.  
 Mr. Juan Hernández López, consulting attorney.  
 Mr. José J. Monclova, pharmacist.  
 Mr. F. W. Dalrymple, sanitary engineer.  
 Dr. José Lugo-Viña, secretary.  
 Mr. Alejandro Vélez, clerk-stenographer.

The board, acting on delegation of the house of representatives, has prescribed rules and regulations in connection with all matters relating to public health, which are:

1. Use of cups in public places.
2. Tenement houses. Amendment by regulation No. 32.
3. Construction and protection against rats. Section 3, amendment by regulation No. 12; amendment by regulation No. 15; amendment by regulation No. 28.
4. Garbage and filth. Amendment by regulation No. 9.
5. Stray dogs and prevention of hydrophobia. Amendment by regulation No. 16.
6. Improvement of lands.
7. Plumbing and sewerage. Amendment by regulations No. 13 and No. 22; amendment by regulation No. 27; amendment by regulation No. 37.
8. Mosquitoes. Amendment by regulation No. 24.
9. Garbage and filth. Amendment by regulation No. 23.
10. Smoke and use of soft or bituminous coal.
11. Conduction of corpses; cemeteries, inhumation, and cremation. Amendment by regulations No. 35 and No. 36.
12. Rat-proofing of buildings and preservation. Amendment section 3 by regulation No. 3; amendment by regulation No. 15; amendment by regulation No. 28.
13. Plumbing and drainage. Amendment articles 9 and 13 of regulation No. 7.
14. Houses and buildings; hygiene; construction. Amendment by regulations No. 19 and No. 33.
15. Rat-proof building and preservation. Amendment to articles 2, 4, 7, and 10, regulation No. 3; amendment by regulation No. 28.
16. Stray dogs and hydrophobia. Amendment to article 2, regulation No. 5.
17. Corpses; cemeteries, inhumations, exhumation, cremations. Amendment article 11, regulation No. 11.
18. Amendments to regulations 2, 3, 4, 5, 7, 8, 9, 10, 11, 14, 15, 16; urban zone.
19. To maintain houses and their dependencies in hygienic conditions and to regulate building in towns. Amendment by regulation No. 14, article 26; amendment by regulation No. 33.
20. Transmissible diseases in animals. Amendment by regulation No. 34.
21. Conduction of corpses; cemeteries; inhumations; exhumations; cremations. Amendment to articles 22 and 41 of regulation No. 11.
22. Plumbing and drainage. Amendment to article 8 of regulation No. 7.
23. Garbage and filth. Amendment to articles 1, 2, 3, 4, 7, and 10 of regulation No. 9.
24. Mosquito extinction. Amendment to articles 4 and 5, regulation No. 8.
25. To prevent and eradicate trachoma.
26. Slaughterhouses, supply of meats. Amendment by regulation No. 41.
27. Plumbing and drainage, and fluid gas installations. Amendment by regulation No. 7.
28. Rat-proof building and preservation. Amendment by regulations Nos. 3, 12, and 15.
29. Dairies, milk depots, and sale of milk. Amendment by regulation No. 40.
30. Bakeries. Amendment by regulation No. 39.
31. Food protection against contamination and to prevent the growth of flies.
32. Tenement houses. Amendments to articles 14, 15, and 16 of regulation No. 2.
33. To maintain houses, buildings, and their dependencies in hygienic conditions, and to regulate building in towns. Amendments to articles 6, 7, 8, 23, and 24 of regulation No. 14.
34. Transmissible diseases in animals. Amendment to paragraph 7, article 8, of regulation No. 20.
35. Conduction of corpses, etc. Amendments to articles 13 and 14 of regulation No. 11.
36. Conduction of corpses, etc. Amendment to article 11 of regulation No. 11.
37. Plumbing and sewerage. Amendment to article 37 of regulation No. 7.
38. Certificates of health.

39. Bakeries, etc. Amendment to article 17 of regulation No. 30.
40. Dairies, milk depots, and sale of milk. Amendment to regulation No. 29.
41. Slaughterhouses. Amendment to regulation No. 26.
42. Railways, street railways, etc.
43. Transmissible diseases.
44. Hotels, cafés, etc.
45. Patent medicines.
46. Vaccination.
47. Transmissible diseases.
48. Conduction of corpses, etc. Amendment to article 11 of regulation No. 11.
49. Transmissible diseases in animals. Amendments to articles 2 and 18 of regulation No. 20.
50. Fowls suffering from certain diseases.
51. Transmissible diseases. Amendment to article 2 of regulation No. 43.
52. Embalmers and disinfectors.
53. Foods and drugs.
54. Cigar factories (health of operators, sanitary condition of buildings, etc.).
55. Food products. Emergency regulation on production and sale of milk.
56. To amend sanitary regulation No. 30 on bakeries, manufacture and sale of bread.
57. To amend sanitary regulation No. 43 on transmissible diseases.
58. To amend sanitary regulation No. 11 on conduction of corpses, cemeteries, and inhumations.
59. To amend sanitary regulation No. 7 on plumbing, sewerage, and fluid gas installations.

The executive division of the department of health is composed of the following branches:

Office of the commissioner, having the corresponding personnel.

Division of transmissible diseases and statistics.

Division of property and accounts.

Division of sanitary engineering.

Biological and chemical and bromatologic laboratories.

Medical supervision, inspection of food and drugs, veterinary inspection, and plumbing inspection, all subdivided into northern and southern districts of the island.

Eight local heads of sanitation resident in San Juan, Caguas, Humacao, Guayama, Ponce, Mayaguez, Aguadilla, and Arecibo.

One hundred and three health inspectors distributed throughout the towns of the island, in number proportionate to the importance of said towns.

The insular asylum for the insane; the asylum for the blind, Ponce; the antituberculosis sanatorium, San Juan; the leper colony on Cabras Island at the entrance to San Juan Harbor; the two charity schools in Santurce, one for each sex, and the school for deaf mutes, Santurce, all depend on the department of health.

Specially, the department is in charge of the suppression of uncinariasis; the anti-malaria campaign and the antituberculosis campaign are carried on by means of hospitals and dispensaries.

In November, 1917, the department created a commission for the study and investigation of cosmopolitan transmissible diseases and of those peculiar to the island of Porto Rico. To this end the department issued the following circular:

SAN JUAN, P. R., November 9, 1917.

*To medical institutions and associations; practicing professors of medicine residing in the island of Porto Rico, and to all technical officers of the department of health:*

This department, to be the head of and to direct which I have been appointed, realizes the rapidity with which modern discoveries relative to transmissible diseases succeed one another. These discoveries give rise to new etiologic conceptions which must unavoidably cause modifications of the greatest importance in clinic therapeutics and prophylaxis.

As morbid parasitism holds first place among the causes of said pathologic species and constitutes an animated, living, and visible etiology, this department understands that the greatest part of its energy and activity, aided by a discreet scientific orientation, must be directed toward a perfect knowledge of said parasitism and toward all sorts of ulterior investigations on the subject, so as to enrich what has been called "medicine of causes," and at the same time to strengthen the ideas of avoidableness and curability, which are their most salient characteristics.

This pathogenic parasitism will lead us to a knowledge of the three capital elements of any morbid type: Cause, lesion and symptom, which must fix the specie and legitimate the nosologic group.

This department is prepared not to limit its action in connection to said diseases. In other words, it is ready to watch and care for public health to a greater or lesser degree, and to apply opportunely all hygienic precepts. Said isolated, simple, and sole procedure must in more or less time lead public health to the deadly quiet of routine. The department desires to tread old paths and to take other action in harmony with the postulation of modern sanitary science, which is not and can not be "a solitary and sad prophylaxis." It does not wish to be bound in the narrow limits of one concept. The desire is to go beyond such limits and by patient and constant investigation and methodical study to learn everything relative to microbes, land, exterior conditions, mechanism, laws of infection, propagation of bacterial diseases and their geographical distribution, the association and antagonism of their parasites, and to reach, if possible, the ground of experimental biology.

Inspired by the ideas above stated, the department has created a permanent commission attached to it and composed of its officers, which shall be known as "Commission for the study and investigation of cosmopolitan transmissible diseases and of those peculiar to the island of Porto Rico."

The commission will be composed of the following officers: The assistant commissioner of health, the chief of the division of transmissible diseases, the assistant and pathologist of said division, the chiefs of the chemical and bacteriological laboratories, the sanitary engineer, and one entomologist.

For the purposes of prophylaxis and to determine the diagnosis on which the same is based, the commission will provide all physicians requesting the same all materials necessary to confirm bacteriologically, chemically, and biologically any such diagnosis. Serums, etc., will likewise be supplied gratis for the use of the poor.

The commission will examine all reports or investigations on transmissible diseases which may constitute a new etiologic or prophylactic factor and which may mean a step forward by the medical class of Porto Rico, whether submitted thereto verbally or in writing by the organizations or professors to whom this circular is addressed.

The commission will direct one or a number of its members to proceed to localities where, because of the importance or novelty of a case of transmissible disease, investigation on the ground may be necessary.

Such is the scheme. The efforts of all will be compensated by the country's gratitude, since the country will note the decrease of the tribute paid by humanity to these avoidable diseases.

A. RUIZ SOLER,  
*Commissioner of Health.*

The insular board of health, the aforesaid commission, the different bureaus, and the several dependencies enumerated are joined by the most perfect solidarity though each is specifically autonomous and their action is uniform and converges to the same object. They receive powerful impulse from a personnel selected under the sound principle of unity within variety in culture values. Said personnel is also selected according to fitness and to capacity and honesty established by proved, positive prestige, and we are hence permitted to affirm categorically that our efforts will at a not distant date be crowned by frank and real success.

## REPORT OF THE INSULAR BOARD OF HEALTH.

SAN JUAN, P. R., July 15, 1918.

HON. ARTHUR YAGER,  
*Governor of Porto Rico, San Juan, P. R.*

SIR: In compliance with your letter of July 9, 1918, I have the honor to submit the following report for the fiscal year 1917-18.

The actual board of health in full and exact comprehension of the immense responsibility inherent in the duty of those who watch over the health of a people, has followed its due course, and by reason of which its regulations in their technical and fundamental bases has become simplified in legal degree as to scrupulousness and care in procedure and in effectiveness of result.

Their labor has had the compensation that some of its regulations or parts of them have served for the formation of like work in other countries, and they have been consulted in other places for the same object, and the Legislative Assembly of Porto Rico approved a law on the 19th of November, 1917, authorizing it to compile and ordering it to compile a sanitary code for Porto Rico and to submit it for approval to the next legislature. For this work the pharmacist, J. J. Monclova, was appointed to take charge of the part relative to drugs; the lawyer, Juan Hernández López, to take charge of the legal part of the code; the engineer, F. W. Dalrymple, the part relative to engineering; the purely medical matters were distributed as follows: Dr. del

Valle Atilas, foods; Dr. Belaval, soils; Dr. Muñoz Diaz, matters relating to air; Dr. López Antongiorgi, the sick and diseases.

Until this date the governor of Porto Rico, the Hon. Arthur Yager, has recommended to the board and the board has authorized the adoption for official use of the "Provisional compilation of sanitary dispositions of Porto Rico," prepared by Dr. Ramón A. de Torres, sanitary official of Arecibo.

Furthermore, the board has made several reports and has held many consultations at the request of the commissioner of health, among which there are two most worthy of mention. First, the project of drainage of the suburb of Puerto de Tierra and the creation there of a laborer's barrio for San Juan; and, second, a unanimous resolution of great moral, social, and hygienic import, the result of the initiative of the president, Dr. del Valle Atilas, and refers to a report sent to Gov. Yager concerning the necessity of adding an amendment to the present marriage law in force in Porto Rico, which shall require the male contracting party to present a certificate, duly sworn and signed by a reputable physician of well-known capacity, that after repeated laboratory tests and for a period of five years prior to the date of the certificate said party has had no manifestation of venereal or syphilitic disease. That is to say, that he has not suffered from such diseases, or, if he has suffered, that he is practically cured of them.

The transcendental importance of this problem can not be doubted for a moment. The person most indifferent to sociological matters can not and should not ignore what the reproduction of the species signifies to individual and collective life, and although it has been well studied in regard to cattle, it has scarcely been outlined in regard to man, and that it is urgently necessary to strive by all means possible to establish eugenic marriage, and that matrimony be no longer a creation of the senses or an impulse of the genital appetite; but should exist, first, in obedience to law and friendship; and, secondly, to an infinite love of humanity, worthy of the immortal progress that rules the world.

During the period comprised in this report the insular board of health has formulated regulation in regard to the following subjects:

Regulation to amend sanitary rules and regulations No. 2, "Tenement houses."

No. 55. Food products; emergency regulations governing the production and sale of milk.

No. 56. Regulations to amend sanitary regulations No. 30, "Bakeries;" baking processes, and sale of bread."

No. 57. Regulations to amend sanitary rules and regulations No. 43, "Transmissible diseases."

No. 58. Regulations to amend sanitary rules and regulations No. 11, "Removal of corpses, cemeteries, burials, disinterments, and cremations."

No. 59. Regulations to amend sanitary rules and regulations No. 7, "Plumbing and sewerage and gas fitting in Porto Rico."

#### REGULATIONS PREPARED BY THE INSULAR BOARD OF HEALTH AND NOT ACTED UPON BY THE FORMER EXECUTIVE COUNCIL AND ARE NOW BEING RECONSIDERED BY THE BOARD.

Regulations to govern the medical inspection of public schools and colleges in the Island of Porto Rico.

Regulation as to water supply and sale of bottled water and the construction and operation of sewers and sewage purification works.

Tenement houses.

Amendment to section 9 of the sanitary regulations No. 5, governing keeping of dogs, the suppression of stray animals, and prevention of rabies.

Sanitary regulations to amend section 10 of sanitary regulations No. 29, governing dairies, milk stalls, and sale of milk.

Blindness from ophthalmia.

The present executive council has under consideration for approval the regulation of this board, entitled "Regulation for watching, combating, and destroying syphilis, gonorrheal infection, and other venereal diseases in Porto Rico."

The board in session on the 2d of October, 1917, resolved that the commissioner of health be authorized to take from the emergency fund, created by the joint resolution No. 4 of the Eighth Legislative Assembly of Porto Rico, the amount deemed necessary for the extermination of anopheles, not limiting the campaign of extinction only to the jurisdiction of Barceloneta, but extending it to all those places where this mosquito exists.



## HOSPITAL OR SANATORIUM FOR THE TUBERCULOUS.

The board is pleased to express the great satisfaction it experiences on considering the generous act of Mr. Pedro Arzuaga on selling to the people of Porto Rico a parcel of land of 106 acres for the price of \$1, which parcel is a part of the property of said Mr. Arzuaga, called "Las Monjas," situated in the barrio of Monacillo, of Rio Piedras, for the installation of a hospital or sanatorium for the tuberculous.

## LEPER COLONY.

In virtue of a letter dated the 25th of May last from the commissioner of health submitting to the consideration of the board the conditions of the leper colony, to determine the possibility of remedying its deficiencies without causing its removal to another site, or of taking into consideration the modern etiological ideas of leprosy, the removal for the benefit of the patients would be indispensable, and in this case to submit a proximate estimate of the cost of land, removal, construction of building, etc., upon the site that should be selected, the board resolved to communicate to the commissioner of health:

First. That the lepers should not and can not continue longer in the conditions in which they are in the island of Cabras.

Second. That the removal of the leper colony is considered indispensable to a site of good conditions where they may be as isolated as they are on the island of Cabras.

Dr. del Valle Atilas asked and obtained from the Governor of Porto Rico leave of absence for three months to visit the United States and Canada. Dr. Muñoz Díaz was elected to substitute him. By reasons of the resignations of Drs. Font y Guillot and Carbonell, and Mr. Domínguez; Messrs. Belaval, López Antongiorgi, and Hernández López were appointed in their places.

Respectfully,

DR. GUSTAVO MUÑOZ,  
*President.*  
JOSÉ LUGO-VIÑA,  
*Secretary.*

## INFANTILE MORTALITY IN PORTO RICO.

Mortality in general is influenced by natality; but in many localities and countries these statistics are contradictory, for a low birth rate may coincide with a high death rate and vice versa; or low natality with low mortality; or high natality with high mortality, which is Porto Rico's case.

To maintain the balance of population in any country, it is necessary to begin on the biologic basis of 400 children between 1 and 5 years of age for every thousand women between the ages of 15 and 45. The following table gives a comparison of Porto Rico and other countries in this respect:

France, 400 children for every 1,000 women.  
England, 439 children for every 1,000 women.  
United States, 492 children for every 1,000 women.  
Sweden, 522 children for every 1,000 women.  
Germany, 535 children for every 1,000 women.  
Porto Rico, 725 children for every 1,000 women.

It will be seen, therefore, that the proportional increase in the population of Porto Rico is almost double to that of France, and larger by a little less than one-third than that of the United States.

Should this proportion continue it will cause such density of population as will powerfully influence the death rate which can not be more alarming. It is not sufficient to attain a high birth rate. It is of the utmost importance to beget sound, healthy, vigorous, and useful children who will live long. Porto Rico needs population in relation to its area, but within the best circumstances possible; that is, under improved living conditions.

And the best sanitary efforts should be directed toward making good the lives of those born under the handicap of family diseases; under the stigma of degeneration including everything from rickets to lunacy, and then toward full entrance into the field of eugenics, applying social hygiene to the preparation of laws for the solution of the medical and sociotechnical problems offered by venereal and syphilitic diseases as well as by other diseases related to the marriage contract under modern law and to unavoidable respect to humanity.

Infantile mortality in the island of Porto Rico during the fiscal year 1916-17 acquired such proportions as have been revealed in the following form:

## FISCAL YEAR 1916-17.

Children who died under the age of 1 year.....	8,410
Children who died between the ages of 1 and 2 years.....	4,385
Children who died between the ages of 2 and 5 years.....	3,914
<b>Total.....</b>	<b>16,709</b>

This total represents 47.82 per cent of the general death rate due to all diseases, which reached the enormous figure of 34,939. Said percentage of 47.82 may be detailed as follows:

	Per cent.
Children who died under the age of 1 year.....	24.07
Children who died between the ages of 1 and 2 years.....	12.55
Children who died between the ages of 2 and 5 years.....	11.20
<b>Total.....</b>	<b>47.82</b>

In other words, the death rate among children under 1 year is a little over twice that of children under 2 and between 2 and 5.

The 16,709 children up to 5 years of age are detailed according to the following nosologic species:

Stillbirths.....	3,853
Enteritis in children under 2 years.....	4,374
Enteritis in children between 2 and 5 years.....	3,757
Congenital debility.....	1,380
Rickets.....	1,112
Meningitis, bronco-pneumonia, tuberculosis, heredosyphilis.....	704
Neglect.....	676
Infantile tetanus.....	347
Umbilical hemorrhage, neonatal cyanosis, omphalitis, atelectasis.....	233
Whooping cough.....	195
Diphtheria.....	78
<b>Total.....</b>	<b>16,709</b>

During this fiscal year 2,302 children under 5 years of age died in the city of San Juan, this figure being almost equal to that of deaths due to all sorts of tuberculosis and 13 per cent of the infantile mortality of the island.

Mortality due to enteritis (infantile diarrhea) amounted to 23 per cent of the total death rate from all diseases.

These figures speak with an eloquence that saddens even the most indifferent and unconcerned spirits, and that gives rise to thought on the most effective means of reducing them.

If all the provisions of sanitary regulation No. 29, relative to dairies, depots, and the sale of milk, were scrupulously complied with all sanitary deficiencies causing contamination of milk which, in default of the ideal food, mother's milk, is and should be the only food for infants, would cease to exist.

But in Porto Rico, to make matters worse, there is no abundance of milk. Empiricism and routine prevail in its "cultivation," which is almost a negation. This scarcity is the source of all temptation to adulterate the liquid.

Just as wet nurses employ foods and drinks which considerably increase their lacteal secretion, so should cows be fed likewise, their food being selected with a view to greater production. The breed should be simultaneously improved by means of well-defined and thoroughly experimented crosses.

In synthesis: Well-cultivated milk produced by healthy cows, milked and transported in accordance with the provisions of the regulations, and dispensed at irrefragable depots, from where it should go to the child's home to be conveniently prepared by the mother, thus preventing many diseases of children, especially enteritis, which is properly called the "Herod of modern infancy."

## FISCAL YEAR 1917-18.

Children who died under the age of 1 year.....	7,501
Children who died between the ages of 1 and 2 years.....	4,184
Children who died between the ages of 2 and 5 years.....	4,317
<b>Total.....</b>	<b>16,002</b>

This total represents 46.44 per cent of the general death rate for all other ages and diseases, and is detailed as follows:

	Per cent.
Children who died under the age of 1 year.....	21.77
Children who died between the ages of 1 and 2 years.....	12.14
Children who died between the ages of 2 and 5 years.....	12.53
<b>Total.....</b>	<b>46.44</b>

The 16,002 deaths of children under 5 years of age are classified under the following nosologic species:

Stillbirths.....	3,707
Enteritis in children under 2 years.....	4,280
Enteritis in children between 2 and 5 years.....	3,452
Congenital debility.....	1,213
Rickets.....	927
Meningitis, broncopneumonia, tuberculosis, heredosyphilis, heredoalcoholism, etc.....	778
Neglect.....	602
Umbilical hemorrhage, neonatal cyanosis, infectious omphalitis, atelectasis, etc.....	171
Whooping cough.....	143
Diphtheria.....	50
Total.....	16,002

A superficial comparison of the foregoing vital statistics will show a reduction of 707 deaths in the fiscal year 1917-18. The fact does not warrant unbounded joy by a great deal, but it is unquestionably a step forward, since the reduction is in the number of stillbirths and deaths from enteritis, congenital debility, rickets, and neglect. In other words, degenerate and infectable infantile fields have been somewhat sterilized, the presumption being that if said nosologic groups continue down the same grade, the ideal of a low percentage of infantile mortality in the island will soon have been reached.

However, these vital statistics would be incomplete if the statement is not made that said infantile mortality must be considered, understood, and appreciated, as the number of children less than 1 year old; the number between 1 and 2 years, and that between 2 and 5 years, and in no way subject to the classification of ages from 0 to 1 year, 1 to 19, 20 to 39, 40 to 59, and 60 to X.

It would be absurd to have infantile mortality depend or based on multiples or submultiples of 10. If this were done, it would be necessary to discard absolutely the different stages of ontogenic evolution, since between a nursing child and a child between 1 and 2 years of age, and between the latter and one between 2 and 5, there exists, from the viewpoint of the causes of death, a difference as great as that between a nursing babe and a fetus, or between a child and a man.

For the same reason the statistical table of infantile mortality does not show certain diseases, such as measles, which, though attacking children under 5 years of age, also attack children over that age, and even adults, the latter with greater intensity, if this were possible. Mortality due to said disease and similar ones has been included in the general death rate.

On the other hand, the fact must not be forgotten, but should be borne clearly in mind for statistical purposes, that children die from causes and incidents which unfavorably influence pregnancy, childbirth, and puerperium, or that even influence conception (specially syphilis), while at the same time it must be admitted that these are morbid causes and agents that act during infancy exclusively.

The statistical comparison of infantile mortality during the two fiscal years 1916-17 and 1917-18, establishes an anthropologic and social problem of great importance. For this reason the country's legislators should not lose sight of the fact that each child born is an enigma for the present and a hope for the future, it being absolutely necessary to remove the general causes of morbidity, which constitute, next to the prevention of tuberculosis, one of the most important cares of the visiting nurse.

The visiting nurse must teach the practice of hygiene in pregnancy and follow up the process of the development, so that fetuses shall reach full growth and mothers receive proper attention before, during, and after childbirth. Such practice is in harmony with the institution of compulsory maternity insurance, which constitutes one of the most important modalities of compulsory disease insurance.

And if, at the same time, courses in eugenics are established in schools for girls, so that the future puerperants may learn to care for children (as above stated, from 600 to 700 children die each year in Porto Rico from neglect), and above all, to regulate natural lactancy; if consultation offices for children and pregnant women are established, and also nurseries, etc., infantile mortality will be seen to decrease unavoidably, rapidly, and constantly to biological limits.

Infantile mortality, like the general death rate, is the result of a considerable number of factors more or less destructive of human life, but all of them corrigible by sanitary organizations, provided that with the aid of the aforesaid underpraised and undervalued visiting nurses a census of pregnant women is taken, as well as one of children under 2 years of age, and of children between 2 and 5. In the same manner a census of natality, still-births, and mortality should be taken, and statistics prepared of births, abortions, and lactancy.

Municipalities are in duty bound to aid in this work of regeneration and life, by enacting ordinances in consonance with said civilizing objectives.

And when the department of health gains possession of said elements of vital statistics then and only then can it wage a scientific fight and obtain a rapid decrease of infantile mortality in Porto Rico.

To show the enormous deficiency in the consumption of cows' milk in Porto Rico there is transcribed a statement relative to the milk supply, based on official reports of health inspectors, which though not including the number of milch cows not subject to the provisions of dairy regulation No. 29, are nevertheless accepted by the department for the purposes of this report, since their exactness is sufficiently guaranteed.

Fresh cow's milk being scarce, it must necessarily be substituted by condensed milk, the dilution of which and the resulting liquid according to the instructions of most manufacturers, are subject to two solutions, to wit: For sweetened milks, one part of milk to two parts of water, and for evaporated milks, without sugar, equal quantities of milk and water.

The liquid resulting from these solutions, although in accordance with official standards, falls within other types of inferior milks.

The following table contains an analysis of the brands of milk as sold on the San Juan market, and allows of the formation of judgment on the absolute and relative values of condensed milk as compared with fresh cows' milk:

*Condensed milk—Analytical data.*

Trade-mark.	Price.	Capacity.	Solids.	Solid nonfat.	Water.	Ash.	Lactose.	Proteid.	Cane sugar.	Fat.
	<i>Cts.</i>	<i>Ozs.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>
Borden's Peerless Brand Unsweetened, Evaporated Milk, Borden's Condensed Milk Co., New York.....	12	12	27.40	20.80	72.60	1.40	10.00	9.40	.....	6.60
	12	12	25.20	18.90	74.80	.90	10.25	7.75	.....	6.30
	12	12	26.85	19.26	73.15	1.85	9.99	7.60	.....	7.16
	7	6	25.08	17.92	74.92	1.42	9.94	7.25	.....	7.59
	7	6	26.65	22.35	71.35	1.25	10.50	10.20	.....	6.30
	7	6	28.25	21.65	21.75	1.40	10.10	9.75	.....	6.30
	7	6	23.70	17.40	76.30	1.25	9.40	6.75	.....	6.30
Gail Borden's Eagle Brand Borden Condensed Milk Co., New York.....	19	15	75.82	20.11	24.18	1.92	10.69	7.53	47.63	8.14
	19	15	77.75	20.00	22.25	.80	13.41	7.79	46.45	9.30
	19	15	77.80	22.38	22.20	1.00	13.55	7.83	45.82	9.60
Unsweetened, Sterilized, Evaporated Milk, Libby, McNeill & Libby.....	.....	.....	30.00	21.25	70.00	1.76	10.28	9.21	.....	8.75
	.....	.....	29.75	22.85	70.25	1.60	9.60	11.60	.....	6.90
	.....	.....	26.80	21.70	73.20	1.30	10.00	10.40	.....	5.10
	.....	.....	76.95	68.55	20.05	1.30	11.35	9.11	46.47	8.40
	.....	.....	78.40	10.00	21.60	1.85	11.96	9.47	46.72	8.40
Anglo-Swiss Condensed Milk Co. Chan Switzerland & London....	.....	.....	81.75	23.34	68.25	1.85	12.30	9.81	.....	8.41
	19	14	74.97	66.65	25.03	1.92	13.63	8.80	.....	8.32
	19	14	76.59	67.26	23.41	2.04	11.96	8.61	44.55	9.33
	.....	.....	33.50	25.25	66.95	1.80	12.20	11.50	.....	7.50
Magnolia Brand, Borden's Condensed Milk Co., New York....	15	14	73.52	64.01	26.48	1.83	12.00	7.34	42.84	9.51

Now, then, from June 1, 1917, to June 20, 1918, 3,029,824 pounds of condensed or evaporated milk have been introduced into Porto Rico. Diluted with water to its maximum dilution so that the chemical composition of the mass of liquid will meet the figures of the official standard, said milk will produce 9,089,472 pounds of liquid, and this quantity reduced to the metric system will make 4,132,524 kilograms of the diluted mass. To reduce the same to liters, attention must be paid to the probable density of the dilution, which will be 1,032 on an average, therefore making 4,004,383 liters during the year for the estimated population of Porto Rico, which is, according to the last census, 1,243,308 inhabitants.

According to data furnished by inspectors, 28,180 quarts of fresh cows' milk are produced in Porto Rico, which quantity, reduced to the total figure of annual production, amounts to 10,285,700 liters.

The total liquid mass, including fresh cows' milk and condensed and evaporated milk, diluted to the consistency above stated, amounts to 14,290,083 liters available for the inhabitants of Porto Rico during one year of 365 days.

After making the corresponding reduction the entire population of the island has available each day 39,150 liters of fresh cows' milk and diluted substitutes. A reduction of this figure to that of individual consumption, according to the figures of the last census, gives an average of 31 cubic centimeters per capita.

And if we now bear in mind that 25 per cent of the fresh cows' milk produced is adulterated with 20 per cent of water as an average, it may be estimated that each inhabitant receives about 1½ ounces of the supposed liquid, the constitution of which is poor, deficient in nourishing and life-giving elements, and charged with the numerous agents of infection already known, by the evil habits and censurable customs governing the procedure of most of those engaged in this industry and their employees.



San German.....	3	182	17	305	2	8	1	1	1	3	1	20	1	10,000
San Juan.....	8	59	26	127	2	8	8	8	8	1	5	5	6	
San Lorenzo.....														
San Sebastian.....														
Santa Isabel.....														
Toa Alta.....	12	115	73	373	3	12	3	1	8	3	2	70	1	
Toa Baja.....	8	323	36	1,040	3	8	5	5	3	8	2	260	1	
Trujillo Alto.....	6	101	84	244	2	6	1	2	3	6	1	115	1	
Utando.....	32	119	39	329	3	32	6	32	6	6	1	115	1	
Vega Alta.....	4	20	4	51	3	5	7	5	4	4	3	84	3	
Vega Baja.....	11	82	67	253	3	11	7	2	9	2	4	209	1	
Yabucoa.....	5	87	27	241	3	5	1	2	2	3	5	35	2	
Yauco.....	23	142	32	158	1	23	1	10	13	10	7	803	5	
Vieques (Isla de).....	8	105	115	202	2	8	6	2	6	6	2	80	2	
Total.....	628	10,396	5,546	28,180	135	619	9	131	275	403	3	254	130	16,213

## TRANSMISSIBLE DISEASES.

Article 28 of the sanitation law, and articles 3, 4, and 5 of rules and regulations No. 43, provide that all physicians practicing in the island of Porto Rico shall be obliged to notify the nearest health officer of the existence of any case of the diseases which they may be treating, or which they know or suspect to exist, contained in the following:

*Model report for the notification of transmissible diseases used by the department of health of Porto Rico.*

## DISEASES WHICH SHOULD BE REPORTED.

Typhus fever.  
Typhoid fever.  
Malta fever.  
Cholera, Asiatic.  
Smallpox.  
Scarlet fever.  
Actinomycosis.  
Anthrax.  
Diphtheria.  
Bubonic plague.  
Yellow fever.  
Dengue.

Beri-beri.  
Epidemic dysentery.  
Epidemic cerebrospinal meningitis.  
Paragonimiasis.  
Pellagra.  
Whooping cough.  
Epidemic paratuberculosis.  
Filariasis.  
Tetanus of new-born infants.  
Malaria.  
Tuberculosis.

Glanders.  
Acute poliomyelitis.  
Ringworm.  
Leprosy.  
Uncinariasis.  
Colibacillosis.  
Pneumonia (acute infectious).  
Malignant pustule.  
Cutaneous syphilis.  
Measles.  
Framboesia tropica.

1. City of..... Disease.....
2. Street..... No..... Ward.....
3. House near to school building, milk depot, store, shop, laundry, etc.....
4. Name or initials of patient.....
5. Age..... Sex..... Color..... Nationality.....
6. Occupation..... Place where working.....
7. Place..... Time residing there.....
8. Day, week, or period of the disease.....

The hygiene of transmissible diseases is a branch of modern medicine, born during the happy times of the discoveries of Koch, Pastuer, Manson, Laveran, Ross, Finlay, Reed, and others, whose works on cholera, malaria, yellow fever, bubonic plague, diphtheria, smallpox, typhoid fever, etc., have been of incalculable benefit to mankind; diseases which at present should not and do not constitute a serious menace to the civilized countries, since their natures, pathogeny, and means of transmission have become sufficiently known, and such being the case, the measures that from day to day acquire greater clinic and therapeutic efficiency are applied.

One instance only expresses with unusual eloquence everything that could be said relative to transmissible diseases. During the French administration in the construction of the Panama Canal (1881-1890), the average death rate among the employees of the canalization of the Isthmus was 61.3 per thousand. During American administration, under the efficient direction of Gen. W. C. Gorgas (1904-1912), the average was only 16.2, and in subsequent years declined to 9.2, a result never before attained in the history of sanitation.

This unusual fact and many others of a similar nature justify the campaign started by the department of health against

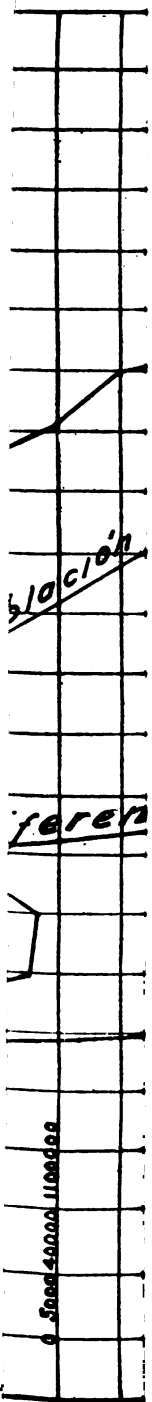
## MALARIA.

A disease of local foci (leaving aside ambulant human malarial sources of infection) and if these are numerous and permanent, adding the sources as the individuals are added, it will cause the most prolific loss of the lives and energies of the human capital of Porto Rico, with the exception of tuberculosis. In 1916-17 there died of malaria in Porto Rico 1,939 individuals—that is, 5.54 over the mortality due to all diseases.

In the diagrams inserted in this report the morbidity and mortality due to malaria during the last five years preceding the current one are shown for the purpose of determining, within the inaccuracy of same, at least the correct figures for the year 1917-18.

The activities and energies in the antimalaria campaign should be divided and subdivided within the unity of a plan of attack and prophylaxis for the present and for the future. The positive knowledge by this department of the existence of an endemo-epidemic of malaria in Patillas, Guayama, Central Aguirre, Salinas, and especially in Barceloneta, in serious forms in some cases, is confirmed by the following

o d h l







letter from the chief of the division of transmissible diseases and statistics, addressed to the commissioner of health, which reads as follows:

SAN JUAN, P. R., *October 1, 1917.*

From: The Chief, Division of Transmissible Diseases and Statistics.

To: The honorable, the Commissioner of Health, San Juan.

Subject: Malaria.

SIR: In the short time that I have been in charge of this division, in spite of the very defective reports of transmissible diseases, and especially with reference to malaria, I have arrived at the conclusion that this disease is found spread all over the island, with extensive localizations in certain municipalities and zones. This evidence I have acquired through trustworthy sources which I possess relative to all the irrigation zone from Patillas, Arroyo, Salinas, Coamo to Juana Diaz, and other sections, confirmed by the sanitary inspectors, whose work in this connection has been effective in some localities, especially in Afiasco, Ponce, Caguas, Arecibo, and Barceloneta. In this latter jurisdiction, the inspector, Mr. Abolaica, has reported 66 cases in one week, from barrios Seboruco, Florida Afuera, and Palmas Altas.

Such data reveals a true endemo-epidemic condition which urgently requires control and suppression by adopting the prophylactic measures recommended by modern sanitary progress, which are most efficient in the disease in question, and particularly so among the peasant population, during the present season upon the near approach of the sugar crop, unless such patients are isolated in time either by taking them to hospitals, or by means of antimosquito work, or by administering quinine to them systematically, and adopting other measures in the case.

Respectfully,

(Signed)

ELISEO FONT Y GUILLOT.

The preceding communication determined the commissioner to address to the insular board of health the letter which follows:

SAN JUAN, P. R., *October 2, 1917.*

The Honorable the INSULAR BOARD OF HEALTH,

*San Juan, P. R.*

GENTLEMEN: I have the honor to inclose herewith, for your information and such action as is deemed necessary, a true copy of a communication received from the chief of the division of transmissible diseases and statistics concerning the alarming number of malaria cases existing in the island, and at the same time to inform you that this office has already taken the necessary measures in accordance with the means and resources at its disposal to combat the epidemic and prevent its spread. However, in case that it should be found necessary to place the malaria cases in hospitals, this department has no available funds for the purpose, unless the honorable board should consider it, in view of the character of the infection and number of cases, an epidemic of malaria and thereby be able to use the funds of the item or appropriation for epidemics in accordance with the act approved April 12 of the current year. Therefore I request of the honorable board the careful study of this matter and such action as may be deemed pertinent.

Respectfully,

(Signed)

A. RUIZ SOLER,  
*Commissioner of Health*

In a session held on October 2, 1917, by the insular board of health, both communications were read, and by virtue of the transcendental importance involved in the facts contained therein, the president submitted them to the consideration of the board, so that it might take the action deemed necessary and pertinent.

The first to speak was Dr. Font y Guillot, then a member of the insular board of health, who made the statement that it was of moment to adduce other reasons to strengthen the contents of his letter to the honorable the commissioner which would justify the rapid and effective action that such circumstances demand in reference to malaria. He said that in Porto Rico even the medically ignorant do not ignore the epidemic character of such disease, not its endemo-epidemic outbreaks, and that when intensified and spread extraordinarily it would then lose its endemo-epidemic nature, acquiring the characteristics of a real epidemic; and that on the island there existed in some places, more than in others, zones of predilection or of a larger localization of the disease, such as the irrigation zone and the jurisdictions of Patillas, Salinas, Santa Isabel, Guanica, Arecibo, Barceloneta, especially the latter, the most conspicuous, the most stricken and afflicted on the island; so much so that the observation and experiences of the physicians of Porto Rico caused them to choose it as a field for

study. This assertion is proven by many examples, some very recent, such as the interesting and patient study of Dr. Vergne Castrelo, who hematologically diagnosed over 300 cases of malaria in all of its forms and malignity.

Later on Dr. Pedro Gutiérrez Igaravidez, as president of the Institute of Tropical Medicine, in the expeditions which form a part of the program to be followed by that body, gave the preference to the jurisdiction of Barceloneta, where he remained for a long time, verifying the existence of the endemia, its endemo-epidemic outbreaks, its consequences, its extension, spread, etc., acquiring very important data, which he compiled and published in a report that he sent to the Governor of Porto Rico about the matter.

All of these considerations, added to the estivo-autumn season now here, permit us to state in a categorical manner that without the adoption of rapid and executive measures the spread of the disease throughout in the future can not be estimated.

In view of the foregoing, he requested the board to reach an agreement that there existed an endemo-epidemic condition of malaria of great intensity, especially in the jurisdiction of Barceloneta, so that the funds for epidemics might be used to combat it promptly and effectively, continuing the work in other zones and jurisdictions where the malaria agent prevails.

Finally, he wishes to make it plain that the compulsory draft being near, which will be filled in no small proportion from among the peasants of the island, the sanitary measure proposed is still more timely when it seeks to prevent the large number of persons bearing the malarial parasite from acting as human sources of infection in transmitting the disease to the multitude of people that might compose the camp quartering them.

Dr. Carbonell, who addressed the board, offered discreet arguments in regard to this vital matter, requesting exact information and statistical data for previous years, which was furnished by Dr. Font y Guillot, and which convinced him of the urgent necessity for prompt action.

The president, Dr. Del Valle, made a summary of the foregoing, agreeing in every respect with the particulars stated and entering into a consideration of the objections that would follow from a distinct and categorical declaration of an epidemic of malaria, which in his opinion might be the object of criticism, and though not justified, a criticism just the same; but that, nevertheless, he understood that the endemo-epidemic condition prevailing in Barceloneta was alarming to such an extent that action ought to be taken in that direction; and taking all things into account, a declaration on the part of the board would be sufficient to enable the commissioner to use the emergency funds that might be required for the purpose.

The pharmacist member of the board, Mr. Monclova, agreed to all of the foregoing statement.

On being submitted to a vote, an agreement was reached in the following terms: "The board of health recognizes that there exists in different jurisdictions of the island of Porto Rico an endemo-epidemic condition of malaria, serious and very widespread in some of them, particularly in Barceloneta, and recommends as an urgent and efficient measure that the honorable the commissioner of health be authorized in order to combat and eradicate same, to use out of the emergency fund appropriated by the joint resolution No. 4, approved by the third legislature of the eighth legislature assembly, such sum as may be deemed necessary to provide proper quarters for the isolation of patients and for the purchase of such disinfectants and medicines as may be necessary to assist in the prevention of transmissible diseases, etc., or to prevent their spread from one locality to another, etc., it being understood that such work shall not be considered as limited to the jurisdiction of Barceloneta, but shall apply to all the municipalities that may be found to be in a similar condition as regards malaria, following a plan of declining intensity in the corresponding sanitary work."

Without losing time and with great haste, the establishment of the Barceloneta Hospital was undertaken in a lumber warehouse of recent construction belonging to the "Central Plazuela," owned by Mr. Eduardo Giorgetti, who, inspired with the generous impulses which constitute his characteristics, ceded the warehouse gratis, paying also for the draining of lands surrounding the buildings, and also of those at a greater distance, where there existed large areas of stagnant waters which constituted extensive breeding places for the mosquitoes carrying the malaria parasite. Mr. Giorgetti furnished electric lighting, telephone service, water, and other emergencies of great utility for the successful operation of the hospital while the work for the necessary installations was being carried out.

The building, which was of sufficient capacity for 64 beds with their corresponding mosquito nets, was made absolutely mosquito proof.

There was installed a laboratory well equipped for the practical hematological analyses of excreta and sputum, as well as for research work and reactions determining the positive results of other infectious diseases.

The personnel was composed of one pathologist, an assistant physician acting as visiting physician and who was in charge of the admittance of patients to the hospital, a minor surgeon, four nurses, and a sufficient personnel for the needs of the hospital.

The hospital was visited by the insular board of health, by the heads of the departments, the speaker pro tempore of the house of representatives, and by the neighboring physicians, who will make exceptionally reputable witnesses of this efficient sanitary work, a résumé of which follows:

*Statement or synopsis showing the antimalaria campaign and movement of patients in the malarial hospital established at Barceloneta.*

Less than 8 years.....	45	Palenque.....	6
Over 8 years of age and less than 15.....	75	Garrochales.....	45
Over 15 years of age and less than 30.....	197	Piche.....	14
Over 30 years of age and less than 50.....	103	Florida Adentro.....	10
Over 50 years.....	34		
<b>Total.....</b>	<b>454</b>	<b>Total.....</b>	<b>454</b>
Barceloneta.....	74	Males.....	325
Florida Afuera.....	170	Females.....	129
Angostura.....	1	<b>Total.....</b>	<b>454</b>
Plazuela.....	10	White.....	251
Palmas Altas.....	92	Colored.....	203
Llanada.....	2		
Seboruco.....	27	<b>Total.....</b>	<b>454</b>
Catalana.....	3		
<b>Types of malarial parasites:</b>			
Plasmodium vivax benign tertian.....			249
Plasmodium malaria quartan.....			2
Plasmodium falciparum.....			33
<b>Blood analyses:</b>			
Total positives.....			284
Total negatives.....			170
<b>Analyses of excreta:</b>			
Grand total.....			454
Total positives.....			274
Total negatives.....			180
<b>Other diseases:</b>			
Uncinaria and other parasites.....			274
Other diseases.....			16

The other diseases referred to in the preceding table are:

Concurrents: Sprue, 2; ovaritis, 1; tuberculosis, 1; typhoid fever, 6; colibacillosis, 1; malarial caquexia, 1; total, 12.

Intercurrents: Abscess, 1; pneumonia, 1; bronchitis, 1; rheumatism, 1; total, 4; in all, 16.

Three deaths were recorded: Sprue, 1; pernicious malaria, 1; colibacillosis, 1.

The total number of patients from each of the barrios shown in the table under discussion is indicated in the diagram following in descending numerical order.

Florida Afuera.....	170
Palmas Altas.....	92
Barceloneta.....	74
Garrochales.....	45
Seboruco.....	27
Piñón.....	14
Planieta.....	10
Florida Adentro.....	7
Palenque.....	6
Catalana.....	3
Llanada.....	2
Angostura.....	1

Such figures speak with a wealth of eloquence, indicating the principal human malarial sources of infection which, compared with telluric conditions shown in the topographic-medical chart of Barceloneta, enables one to observe that they keep in themselves a perfect parallelism and an absolute and direct proportionality, revealing at the same time large breeding places for the anopheles mosquitoes in that region or section; very expressive facts meriting attention for the proper proceeding to follow in the antimosquito campaign and that of sanitation in the above-mentioned barrios.

The number of hematological analyses to investigate malaria was much greater than the number of patients admitted to the hospital, because of the necessity of second analyses to determine the diagnosis with precision in those cases where the result of the first analysis was negative.

Upon the initiation of the work in the hospital, the samples of blood were obtained by frottis upon these plates, using for coloring, without system, the principal modifications of Romanosky (Giemsa, Wright, Leishman, Wilson), which furnished at the most 60 per cent positive cases in the first analyses, it being necessary to resort to second analyses. To obviate this difficulty, the thick plate was adopted, previously dissolving the haemoglobin before coloring the preparation; a process which avoids the repetition of the microscopic investigation, as it enables one to obtain a percentage of 90 per cent of positive cases (when the parasite exists) and proves the certainty of the negative character of the other 10 per cent.

The index of endemia in this region due to malaria was determined in an incomplete manner, being limited to general hematological analyses, to the reports of positive cases treated in the hospital or at their homes, to the clinically diagnosed at the dispensary; the index of latency obtained by means of a careful splenic examination of children less than five years of age and at other ages is lacking, but it is known that the index decreases as the age increases. Neither was a microscopic examination made of the stomachs and salivary glands of the anopheles mosquito, because the department lacks the services of an entomologist expert and versed in the technique of such investigations. It is not desired to conceal these deficiencies that should and will be overcome and remedied in analogous future works.

No nosological peculiarity was verified worth mentioning. The clinical histories did not reveal the presence of cases of hemoglobinuric fever, which frequently occurs in the malarial regions on the south part of the island, particularly in Patillas and Salinas.

The cyclo-parthenogenetic phenomenon of the macrogametes of the tertian, quartan, and estivo-autumn form was not observed in any of the patients.

Two patients were only attacked by the parasite of the quartan infection (plasmodium malaria), which appears to be rare in the parasite fauna of Porto Rico, a fact proved also by hundreds of analyses made in the biological laboratory of the department.

Some 56 per cent of the cases treated were suffering simultaneously from malaria and intestinal parasites, especially uncinaria.

The work which was accomplished in this hospital during the period it was operated (163 days) constitutes the first stage of the campaign against malaria, and future stages will develop in accordance with the experience obtained sufficient to correct a few administrative deficiencies, making the hematological technics more effective with more adequate processes, and in consequence more exact and more apparent in the determination of the parasite and making a study of the anophelic conditions in the respective region.

Another fact has been proved, and that is the stubborn and, to a certain extent, natural resistance of the peasants to submit to medical treatment in the hospitals, and which can be explained because the hospitals maintained by the municipalities in Porto Rico are generally in a deplorable condition, and the patient who is unfortunate enough to enter one of them for the first time upon returning home firmly makes up his mind not to avail himself again of this service of the municipal charity. For this reason the physician in charge of the malarial hospital and the sanitary inspector were compelled to request more than twice a week the assistance of the police to compel the malarial patients to enter the hospital.

In spite of this opposition, which may be overcome, the absolute necessity arises for a malarial hospital in all regions where the disease prevails with characteristics of real endemo-epidemic, endeavoring, however, to use them for severe cases in patients without pecuniary means. For mild cases the dispensaries are sufficient, together with the home services rendered by well prepared inspectors specialized in the work, who will distribute the benefits of prophylactic and curable measures, well conceived and perfectly conducted and carried out, which may be synthesized—curing the sick and using preventive measures for the well.

This combined process of hospitalization in conjunction with the dispensary in its domiciliary modality has been crowned with an astonishing success on the Italian border, in the Balkans, in Panama, when joint works of general sanitation and an intense antimosquito campaign have been carried out.

*Statement showing the expenses incurred in the hospital for malarial patients established at Barceloneta on October 24, 1917, and closed April 3, 1918.*

**Repairs to building and establishment of the hospital:**

Expended for labor and incidentals in connection with cleaning, draining, and installation.....	\$144.93
Carpenters' wages and other labor.....	417.40
Building materials.....	361.46
Electric installation.....	38.55
	<hr/>
<b>Salaries and general expenses:</b>	\$960.34
Technical personnel and assistants.....	1,391.16
Subsistence of patients and employees.....	1,761.63
Medicines.....	481.79
Traveling expenses of the department's carpenter.....	22.95
Postage, and freight on furniture, materials, and medicines.....	14.73
Unexpended property.....	16.50
Fuel, laundry, ice, and other minor expenses and incidentals.....	144.43
Stationery.....	49.35
	<hr/>
<b>Total expended.....</b>	<b>4,842.88</b>

**This amount has been charged to the following appropriations:**

To the emergency fund for control and suppression of epidemics.....	\$2,528.46
To suppression of measles, nurses paid from this fund having rendered services in connection with the hospital, hence one-half of their salaries has been charged as an expense of the hospital.....	294.16
To mosquito extermination and suppression of malaria from Jan. 1, 1918, on which date the new budget went into effect.....	2,020.26
	<hr/>
	<b>4,842.88</b>

**SANITATION OF BARCELONETA.**

Barceloneta is a town of about 1,600 inhabitants, located on the banks of the Manati River, between Manati and Arecibo. Its streets and surroundings have an elevation of 3 meters above the normal river level, and could be easily drained into the river.

As stated, the town is bounded on one side by the river and on the other sides by extensive plains which lack the proper ditching for adequate drainage of the lands, inasmuch as the very few existing ditches have very little grade, width, and depth.

A "caño" or lagoon known as "Marrero" starts from the south part of the town; at about 150 meters it widens out forming a swampy lagoon, the bed of which for the most part is full of vegetation, which causes the formation of stagnant waters constituting prolific breeding places for the anopheles, the malaria-bearing mosquito, which breeds intensely because of the favorable conditions therefor.

As the point where the railroad track leading from the station of the American Railroad Co. to Central Plazuela crosses this "caño," the surface of the water is 1 meter 343 millimeters higher than the water level of the Manati River. Therefore by digging a ditch 6 feet wide with its sides sloping 1 foot 2 inches and its bottom with a grade not less than 2 feet per thousand from the aforesaid railroad crossing to the river the drainage could be accomplished with great efficiency. A part of this ditch would run through the lagoon itself, so that the feasible plan in that section would be to channel the lagoon, destroying at the same time all vegetation growing on the bottom and sides of same.

There exist other sources of malaria infection formed by numerous ditches and their branches, which, interwoven, cause the stagnation of the water for several days; some lack the necessary grades and others have so little grade as to be useless. These ditches should be cleaned and given proper grades toward the river. The "caño" should be channeled and cleaned to make the water flow, as it is known that the mosquitoes prefer the dark, shady places containing stagnant water in which to deposit their eggs.

A channel 10 meters wide by 800 meters in length carries water from the Caño Tiburonos to the Central Plazuela which is used for the cooling of various apparatus used in the elaboration of sugar. A pump draws water from this caño and conveys it to the apparatus. After it has been used it is disposed of by means of a ditch varying in width from 1 to 2 meters. In certain sections this ditch is covered, and other secondary ditches drain into it, which increases its volume through its length across cane fields, to empty into the Manati River.

Along the road leading to barrio Palmas Altas there exist other "caños" and an indefinite number of ditches where stagnant water collects, especially during the rainy season, the ground being always saturated. All these "caños" are covered with and full of "enea" and other plants which grow in swampy lands.

From the foregoing it follows that in order to improve the conditions existing at Barceloneta the work there must be divided into four parts:

1. To weed and radically clean all places where water collects or may collect.
2. To channel these places to accomplish an effective permanent drainage.
3. Constant oiling of those places where drainage may be impracticable.
4. Filling in of such places where channeling would be too expensive and oiling very difficult.







## ANTIMALARIA DISPENSARY AT SALINAS.

Taking into consideration the fact that the municipal jurisdiction of Salinas, after Barceloneta on the north coast, has been and is at present one of the sections most stricken by malarial infection on the southern coast of the island, and one of those included within the irrigation zone, it plainly justified the selection by the department of health of this jurisdiction for carrying out an intensive antimalarial campaign, similar and simultaneous to that carried out in Barceloneta.

In the town and in the barrios of the plains, due to peculiar topographic medical conditions, malaria is of frequent and unusual seriousness, while up in the mountains or altitudes it is rare because of the absence of stagnant waters, as the rain waters increase the flow of brooks or rivers, or flow toward the cane fields, depressions, and valleys, carrying along the organic detritus, wiping out the breeding places for the culex and anopheles mosquitoes, which are few, while on the contrary there exists an extreme abundance of breeding places in the ponds, pools, and stagnant waters of the irrigation canals.

The mortality due to malaria in Salinas has reached the high figures of 9.89 per cent over the total mortality in the locality in spite of the antimalaria dispensary established and opened to the public on October 4, 1917.

Primarily a combined work of hospitalization, dispensary, and domiciliary visits to militate against the endemo-epidemic was thought of, and the department requested the cooperation of the municipality of Salinas to secure a building in which to establish the hospital; the council of that municipality seconded and gladly adopted the project, as shown by the following document:

SALINAS, P. R., January 1, 1918.

HONORABLE COMMISSIONER OF HEALTH,  
San Juan, P. R.

SIR: I have the honor to inform you that the municipal council agreed in session held on the 27th day of December, 1917, to cede to the department of health the municipal hospital of this town, so that it may be equipped for the care and treatment of malarial patients under the direction of same, and that a house be rented to care for the patients suffering from other diseases.

Steps were taken to obtain from the owner thereof the only house suitable for the purpose at present unoccupied, but it was impossible for us to reach an agreement, as a result of which we have no building available for the transfer of the patients.

In spite of this, however, our agreement remains in full force and effect, and as soon as we can obtain a suitable house the transfer of the patients will be made. Meantime, the department may, if deemed advisable, equip and use for malarial patients the greater part of our hospital, letting us use only a part of same to care for our emergency cases.

Respectfully,

(Signed) J. BENVENUTI, Mayor.

The antimalaria campaign undertaken at Salinas was started on October 4, 1917, taking up the work of locating the malarial human sources of infection in the town and in the barrios of the municipal jurisdiction, especially in that of "Aguirre," "Poblado Coqui."

As an indispensable and preliminary work, various domiciliary visits were made by the Sanitary Inspector, Manuel Rodríguez first, and later by Dr. R. C. Umpierre and Inspector Pablo Vázquez, within the urban zone, verifying 122 positive cases of malaria, the greater part hematologically evidenced but not the balance, owing to their having quickly responded to treatment with salts of quinine promptly administered. At the same time the treatment was administered to those really healthy and those apparently so, who lived with the patients.

*Streets in the town of Salinas where malarial cases were found.*

Cases.	Cases.
Palmer Street..... 15	San Miguel Street..... 6
Tamarindo Street..... 13	Hospital Street..... 5
Union Extremo Este Street..... 13	Nueva Street..... 5
Baldorioty Street..... 12	Cementerio Street..... 5
Monserrate Street..... 12	Ponce Street..... 4
Rosario Street..... 11	Amadeo Street..... 4
Union Extremo Oeste Street..... 11	
Mudos Rivera Street..... 9	Total..... 132
Cayey Street..... 7	

Simultaneously over 180 breeding places for the mosquitoes culex and anopheles were destroyed, carrying on a constant and intense oiling of the ditches, ponds, and wells containing larvæ. The same work was carried on in the latrines.

To all the patients some quinine salts was administered in time in the necessary doses.

It must be conceded that for a small town the number of these cases was entirely too many not to be dangerous from the standpoint of propagation, which justified the administering of quinine to the healthy.

It was also proved that the number of patients on each street was in direct proportion to the number of mosquito breeding places in such street.

Two cases of hemoglobinuric fever were recorded in the persons of Anastacia de Toste, 34 years of age, residing on Palmer Street, and Elisa Vázquez, 24 years of age, Muñoz Rivera Street, diagnosed by Dr. L. Montalvo Guenard. The former died.

The hematological examination gave the following result: Seventy per cent parasite of mild tertian, 27 per cent the estivo-autumnal parasite, and 3 per cent the quartan fever parasite; these latter were confirmed by the biological laboratory at San Juan.

Similar work was carried out in the settlements and wards, with the following results:

	Cases.		Cases.
In the plantation Carmen.....	34	In the plantation Margarita.....	19
Settlement Pueblo.....	34	Settlement Río Jueyes.....	13
Settlement Las Marías.....	28	Settlement Elías.....	16
Settlement Talas Viejas.....	27		
Settlement La Playa.....	23	Total.....	194

#### BARRIO "AGUIRRE," POBLADO "COQUI."

A malaria-uncinariasis dispensary was established at the place in connection with the dispensary at Salinas, visited twice a week by Dr. Umpierre and the local inspector, where the necessary salts of quinine and pharmacological preparation indicated for uncinariasis were administered.

As a camp for prisoners was established in this barrio, the sanitary activities had to be extended to same, inasmuch as it furnished the greater number of patients. The healthy prisoners assisted efficiently in the work of drainage and oiling.

The construction of latrines was immediately ordered, as the greater part of the houses lacked this sanitary necessity, which deficiency caused the spread of the excretas over the open country, a fact more than sufficient to explain the great number of uncinaria patients in the barrio.

It is pertinent to record that in this sanitary campaign the manager and personnel of the central Aguirre cooperated with remarkable efficiency in draining the places upon which the houses were built, putting them in good condition, and providing them with latrines built in accordance with plans furnished by this department.

The number of malarial patients in this settlement, including those from the camp, amounted to 102, which, added to the 132 from the town and to the 194 from the settlements and barrios, makes a grand total of 428 persons attacked by malaria.

At "Coqui" 152 uncinaria patients were treated.

Summarizing the foregoing, the following conclusions can be arrived at:

1. In Salinas there has existed, and exists periodically, a positive endemo-epidemic status, very apparent as much in the town as in the barrios, especially in "Coqui."
2. The last epidemic increased progressively, and, beginning in the month of March, it commenced to decline as logical consequence of the antimosquito campaign, other sanitary measures, and to treatments with quinine and arsenic.
3. The mortality, although high, as has been noted, has not been excessive.

#### ANTIMALARIA DISPENSARY AT PATILLAS.

The municipality of Patillas, also comprised in the irrigation zone, is another of the jurisdictions of the island where malaria infection prevails with unusual frequency, manifesting itself by endemo-epidemic outbreaks of great intensity—a very strong reason for a serious and permanent antimalaria campaign.

There was established a dispensary, which was in operation for five weeks only, due to the resignation of the physician in charge thereof. It was impossible, in so short a period of time, to accomplish any effective work, and the results obtained can not be shown by data meriting a thoughtful clinic-sanitary interpretation. As soon as circumstances will permit, by the proper technical personnel, said dispensary will be reestablished.

To conclude this report on that which concerns malaria, it should be stated that the division of sanitary engineering has under study two projects of drainage, one of which is a pool existing near the town of Hatillo, which constitutes a prolific breeding place

for mosquitoes and is a determining factor in the periodical outbreaks of malaria recorded in that locality.

The other project refers to Vega Baja, where there exists, at the entrance to the town from San Juan, another large lagoon, which explains the great number of malaria patients in that town.

Finally, the department of health will begin in the next fiscal year the construction of a hospital for malarial and uncinaria patients in the city of Guayama, center of the irrigation zone, which will be located on lands ceded by that municipality, and will be constructed in accordance with plans prepared by the sanitary engineer.

*Mortality due to malaria on the island, 1912-1918.*

	1912-13	1913-14	1914-15	1915-16	1916-17	1917-18
Population.....	1,164,998	1,180,660	1,196,322	1,211,984	1,211,984	1,243,308
Deaths from malaria.....	1,160	574	765	1,384	1,939	1,528
Average per thousand.....	.99	.48	.64	1.10	1.67	1.17
Average per thousand over mortality.....	4.45	2.60	3.25	5.02	5.54	4.16
Barceloneta:						
Malaria.....	67	12	19	24	13	46
Deaths.....	302	227	250	303	476	420
Estimated population.....	12,268	12,476	12,784	12,892	13,100	13,308
Average per thousand over mortality.....	22.18	5.28	7.6	7.62	2.73	10.95
Average per thousand.....	5.46	.96	1.46	1.86	.99	3.45
Salinas:						
Malaria.....	58	28	66	189	114	63
Deaths.....	290	228	262	430	408	269
Estimated population.....	12,946	13,463	13,978	14,493	15,008	15,523
Average per thousand over mortality.....	20	12.28	25.19	30	27.94	23.42
Average per thousand.....	4.47	2.15	4.72	8.90	7.59	.41
San Juan:						
Malaria.....	4	6	5	8	20	8
Population.....	53,261	54,776	56,291	57,806	59,321	60,836
Deaths.....	1,381	1,272	1,379	1,441	2,302	1,622
Average per thousand over mortality.....	.28	.47	.36	.55	.86	.49
Average per thousand.....	.07	.10	.08	.13	.33	.13

### TUBERCULOSIS.

The hygienic faults committed in Porto Rico in connection with the white plague have been enormous. A sincere act of contrition is due, and above all a firm resolve to amend.

Our antituberculosis fight has been more potential than real or effective, and for this reason has failed to achieve high aims or positive success. When not stationary because of circumstantial conditions of environment, it died at birth and became petrified in the sphere of unproductive aspirations or in that of sterile or unsound sentimentalism.

And it was natural and logical that this should happen. Those in our country whose duty it is to study the intimate relations between our political, social, ethnical, and eugenic, economic, intellectual, and cultural conditions and the spread of tuberculosis have hardly done so or have failed to do so at all. This disease more than any other is of the dominion of social action in all countries, but in Porto Rico it is fatally harnessed to the utilitarian chariot and to "made interests." Recent incidents confirm this assertion.

It has not been for lack of sound and well-directed initiative. In Porto Rico it is impossible to mention the fight against tuberculosis without giving rise in memory, by a process of association of ideas, to three names, to wit: Francisco del Valle Atilas, now chairman of the insular board of health, who was the Baptist, the precursor in this island of the campaign against the dread disease; Mrs. Edith Elmer Wood, in love with the high ideals of human charity, was the initiator and the soul of the anti-tuberculosis league of San Juan; and lastly, Pedro Gutiérrez Igaragivez, distinguished phthisiologist, brought the idea to effective crystallization as shown by the anti-tuberculosis sanatorium at the Seboruco, Santurce.

The San Juan league, and its sister league in Ponce, which came to life subsequently, were never able to reach full development. In vain did they in their altruism and with their science call on all hearts. Their voices denouncing deficiencies in shops and filth in houses were lost in the immense vacuum of indifference. Their eyes, ever watchful for abuse, always looking for sufferers and scrutinizing vice, failed to provide breath for justice-dealing hygiene. In an environment where to aid a tuberculous patient was sarcasm in the eyes of the fearful masses or of the trembling egotist, they isolated and treated the poor.

And the two sanatoriums, sacred asylums because of their purpose, and august temples of philanthropy, are at the present time suffering a grave crisis because in establishing the new régime under the name of Jones Act, attendance on tuberculous persons, paid for out of sums appropriated for the purpose, should and must be given, by virtue of certain sections of said act and in accordance with the opinion of the auditor, by and in institutions under control of the commissioner of health.

The antituberculosis leagues of San Juan and Ponce were therefore deprived of the subvention they had received, it having become impossible for them to continue their generous and altruistic work. Much to its own regret, the San Juan league was obliged to adopt a sad and extreme though imperious resolution—that of notifying patients and employees of the sanatorium intrusted to its disinterestedness and philanthropy that on June 30, 1917, the institution would be definitively closed.

A sanitary conflict was evident if the 40 unfortunate victims of the white plague were returned to collective environment and life. Every one of them must become an ambulating patient, a dangerous conveyor of Koch's bacilli, disseminating them throughout the city. Things being thus, the league very wisely decided to sell to the people of Porto Rico all its real property, furniture, chattels, utensils, apparatus, or instruments. The commissioner of health was informed of the proposal and the crisis, which might have had consequences fatal to public health, was thus prevented.

The department of health annexed the aforesaid sanatorium to the division of transmissible diseases and statistics, and the same continues satisfactorily to fulfill its purpose.

Last January the acting governor, Hon. H. L. Kern, served notice on the commissioner of health to be ready to transfer the Antituberculosis Sanatorium at the Seboruco to another place at a moment's notice because urgent and uneludible needs of military nature required such unrefusable action.

Steps were taken without delay to select and obtain an adequate piece of land. When "Tibbitt's Farm" in the vicinity of the sanatorium and near the shore parallel to the Loiza road was obtained, on which farm three buildings were located, the protest of some neighbor arose as if by magic, and an obstructing campaign was initiated without a serious reason to justify it. The result was the owner's refusal to sell, the department finding itself forced to look in other directions.

The peremptory order of the military authorities was not long in coming. The difficult problem of the patients in the Seboruco Sanatorium was again raised. It was inconceivable and inhumane to turn 39 tuberculous patients into the street, and no other means of tackling such a serious problem being available, it was decided to isolate them temporarily at least in the quarantine hospital in the Marina, a district where there are many poor though generous and humane inhabitants who have willingly accepted their sad neighbors save one or another protest from proprietors having their residences at great distances from the place. Other patients suffering from other transmissible diseases and quarantined in the same hospital, comrades in pain and suffering, have aided those suffering from tuberculosis in bearing their misfortune.

But at any rate, the organization and regular operation of the quarantine hospital was interrupted and disturbed, this fact being more noticeable since at the time cases of measles, whooping cough, and varioloid existed in the Boy's Charity School in Santurce, it being impossible and indiscreet to isolate them in the quarantine hospital. This was necessarily done in an incomplete manner in the school itself, where the patients were exposed to all contingencies of possible epidemics of great proportions.

Simultaneous with the military order new efforts to secure a site for the permanent establishment of a tuberculosis hospital or sanatorium were commenced.

It is pertinent to state in this respect that the department of health thought of establishing a sanatorium at Aibonito or Barranquitas, and that both municipalities have openly opposed the project, things having gone to a point where all the property owners have agreed not to sell any of their lands for the purpose.

Many properties were looked over, different tracts were carefully examined, and scrupulously studied from the climatotherapeutic point of view, and decision was reached in favor of one whose owner made promise of sale.

A campaign of obstruction commenced immediately. Great influences were brought into action. The conscience of the low-spirited was alarmed and the opinion of the neighborhood and of the municipal council of Rio Piedras (!) was led astray, all of them being led to believe in the demerit of property in the district of Sabana

(!) Rio Piedras tenaciously opposed the establishment of the tuberculosis hospital in Sabana Llana. It is proper to state that said town occupies tenth place in statistics relative to mortality due to tuberculosis during the fiscal year 1917-18.

Estimated population.....	19,137
Deaths from tuberculosis.....	54
Rate per thousand of population.....	2.82

Llana if the tuberculosis hospital should be established there, and that such action would necessarily mean a heavy deficit in public revenue.

A collective protest came of these machinations, which protest culminated in a hearing in the house of representatives. In other words, it was desired to solve the problem of tuberculosis, which is in itself arduous, abstruse, full of difficulties and uncertainties and which in Porto Rico more than elsewhere is a social evil, an evil full of misery and an evil of living conditions, requiring urgent correction in spite of everything, by subordinating it to the narrow concept of financial interests.

The house, prudent and wise, refused to patronize said conventionalities and absurd and narrow pretensions, since it was convinced of the country's lack of clinics for the poor, of clinics for misery, and of clinics for all factors determining the tubercule and for already active tuberculosis, and was also persuaded that the struggle against the white plague is not a simple fact of medical pathology but a very complicated problem of social economy, which at present bears all signs of a dogma of biologic potentiality, or, in other words, of human biomechanics.

It is, moreover, a matter of Porto Rican exegesis (if the phrase is permitted) unfortunately questioned, but the time devoted to its scrutiny will be well spent since such scrutiny will uplift our regional soul to spheres of ideals and self-esteem, thus drawing it away from the focus of bagatelles, and from enthroned superficiality and ignorance.

Things did not stop here. A supreme effort was made, and a petition was filed in the Federal court for a prohibitory interdiction or writ of injunction against the commissioner of health, to prevent the purchase of the parcel of land. Decision of the court in the suit is still pending.

On this sad and bitter road there appeared a generous and altruistic soul in the person of the distinguished gentleman, Mr. Pedro Arzuaga y Peraza, who, prompted by the noble desire of having the department of health construct a tuberculosis hospital or sanatorium as soon as possible, sold for \$1 to the people of Porto Rico "a parcel of land situated in the district of Monacillos, municipal jurisdiction of Rio Piedras, consisting of 106.98 acres of land, equivalent to 42 hectares 4 ares and 33 centares. Said parcel is bounded on the north, east, and west by the estate known as Las Monjas, belonging to Messrs. Rafael Fabián, José D. Riera, and Francisco Robledo, and in part on the south by the vicinal road running from Rio Piedras to Bayamon. The rest of the southern boundary consists of a private road leading from the property of said Messrs. Fabián, Riera, and Bobledo to the estate known as Josefina."

The aforesaid parcel of land is valued at \$20,000. Mr. Arzuaga is a native of Vizcaya, Spain, but his sentiments are with those of our people, and he loves this land where, due to his intellectual efforts and to his power of will, he has built up a fortune. Believing that his own welfare must depend on that of others, he carried out without ostentation and with the most laudable spontaneity this act of generosity which so exalts him and which this department is pleased to state in this report for information of the people of Porto Rico who are wholly disposed to answer gratefully to their benefactors.

Words are insufficient to express the social-hygienic value and opportuneness of said donation at the present time which is the precursor of events in preparation for the day when peace again appears on the world's horizon, for then humanity will find itself on another battle field—that against tuberculosis—involving the future of the human race and its ethnical and eugenic value. These problems were being satisfactorily solved, but their final solution must now be delayed for some time after the infinite sadness caused by the unbound mourning resulting from the world catastrophe shall have ended.

Peace is not yet in sight and the necessity of increasing every effort to combat the disease is already felt.

In bacteriology the fact that all infections dispose of two powerful elements for the purpose of attacking their victims, is fundamental. One is the increase of morbid power of germs, and the other is the reduced power of individual resistance. Both factors are at this critical time exercising their pernicious influence in Porto Rico, where, on the other hand, although it is painful to say so, the antituberculosis fight is in hesitancy and timidly found on deficient prophylaxis.

As to etiology, the people continue in their disconsoling pessimism to believe that tuberculosis is neither preventable nor curable.

In phthisiologic clinics, certain peculiarities of tuberculous patients in Porto Rico have not been conveniently studied for lack of dispensaries, sanatoriums, and hospitals properly served and organized so that these elements of combat might serve their purpose, which is to provide centers of hygienic-sanitary education; for the cure or improvement of patients; for the eradication of the disease, and at the same time, of scientific observation.

The dispensary is and will always be the most solid basis of the hygienic and social struggle against tuberculosis, for it will in two different ways have cognizance of cases. One is compulsory report of cases in accordance with regulation No. 43 and section 27 of the sanitation act, and the other is the voluntary report of patients to said dispensaries, positiveness being confirmed by domiciliary inspections of visiting nurses, since among her many duties is the taking of a tuberculosis census to be included in the "Compulsory register of cases." The department of health, employing the power conferred upon it by law and the regulations, may isolate any tuberculous person who neglectfully or willfully contravenes sanitary precepts, thus becoming a menace to his neighbors and to his own family. This procedure is followed in some cities and counties of the United States without scruples of any sort.

It is true that it has not yet been thought opportune to submit phthisics to the same restrictive measures applied in cases of infectious fevers and other transmissible diseases; but these measures would be unbearable if we consider the duration of the disease. It should be known, however, that this liberality is bounded by limits of exact observation of sanitary treatment of tuberculosis.

This is not the opportunity to point out the immense, the transcendental importance of dispensaries and of their powerful helper, the visiting nurse, especially in connection with conscientious statistics of mortality due to tuberculosis, statistics which should reach the very limits of exactitude so that the unheard-of fact of reporting cases of tuberculosis hours prior to, and what is worse still, hours after, death will not again occur.

As the curing of phthisis depends on an early diagnosis the dispensary will state whether or not a person is tuberculous or whether it is an incipient or advanced case, so that he may be sent in the first case to the sanatorium, called by somebody the quinine of tuberculosis, and in the second case to the tuberculosis hospital, where the sequestration of such patients should be successfully handled, sometimes improving the state of their health, and at others achieving their cure, but always stimulating their nutritive operations, strengthening their nervous system, mineralizing their organs, increasing their intake, diminishing their perspiration, preventing their waste, studying their hereditary tares, the condition of their metabolism, and the drains out of which their lives flow. The department of health of Porto Rico thinks it pertinent to state in this report that the establishment of a tuberculosis hospital in the vicinity of a town is the only factor which can cause a rapid decrease in the coefficient of mortality due to said disease in such city, for the reason that the isolation or hospitalization of ambulating tuberculous persons who leave sinister signs of their passage through the streets, hotels, homes, lodging houses, cafes, theaters, cars, and wherever the public gathers, reaching even the schools, causes the most pernicious agent of propagation of the disease to disappear *de facto*, the disease being finally eradicated.

At the present time the island of Porto Rico counts on the following elements in the rude battle against tuberculosis: The San Juan Sanatorium, in full crisis as aforesaid; the Ponce Sanatorium, the capacity of which is 20 patients; a newly created hospital in Yauco, of the same capacity, and due to the inextinguishable generosity of Mr. Arturo Lluberas; the La Perla Hospital in San Juan, which has 20 beds; a tuberculosis ward in Tricoche Hospital, Ponce, and another in the Mayaguez Hospital, both having 16 beds.

What poor resources to conjure the great evil.

Besides a number of dispensaries which have begun to operate regularly in the district capitals; the hospital to be established on the lands donated by Mr. Pedro Arzuaga, and those which may hereafter be established in consonance with available resources, the department of health suggests to the municipalities of the island that either by availing themselves of donations, by awakening and stimulating social action, or by means of their own resources, they gradually and progressively construct a number of small houses for tuberculous patients, subject to a scientific plan, of the subsequent maintenance of which this department would take charge.

This is an easy and practical manner of fighting and conquering the terrible disease. It would be the effort of the community and of hygiene in intimate association with the people.

#### UNCINARIASIS.

Eight hundred and sixteen deaths due to this transmissible disease, or 1.26 per cent of the general death rate, were recorded in the island of Porto Rico in the fiscal year 1916-17. These figures will be found to be notoriously inexact when consideration is given to the fact that the certificates of death of the numerous country people who die without medical aid, issued by municipal charity physicians on information obtained from relatives of the deceased or from the ward commissioner, both inexperienced, are far from being a faithful expression of the clinical truth. The result is that many

deaths due to uncinariasis go to the malaria, tuberculosis, hepatic affections, anemia columns of statistical reports, etc., and vice versa.

Compulsory disease insurance will obviate this enormous deficiency in vital statistics. Medical attendance on said patients would lead to an exact and well defined diagnosis and statistical figures would be exact.

Moreover, accepting as correct the total of 816 deaths due to uncinariasis in 1916-17, and that of 998 in the 1917-18, or 3.28 per cent of the general death rate, the campaign recommended by the department of health to suppress ankylostomiasis in Porto Rico is fully warranted. Such campaign defines new methods and establishes more positive procedure for the action or manner of operating. Anemia dispensaries in accordance with the sound practice dictated by experience. In other words, a maximum of work in minimum time would be done by having the personnel of the dispensaries proceed in search of persons conveying the parasite, in order to follow and watch them, and wherever possible to place them in hospitals for treatment until completely cured.

This result must unquestionably be reached through preliminary investigation, which will surely lead, first, to the prevention of the introduction of laborers suffering from uncinariasis into one or more coffee plantations, sugar centrals, or districts of any jurisdiction free from the disease; and, second, to prevent in the already infected regions the contamination of persons free from the disease.

The difficulty of obtaining both objectives which is more apparent than real, is quite vincible. The means is the appropriation of \$50,000 in the next budget, to be applied to the maintenance of the dispensaries and hospitals of Utuado and Lares.

An example will make the purpose clearer. Imagine a coffee plantation, a sugar central, or a country district where a scrupulous preliminary investigation establishes the absence of infected laborers. To prevent contamination it will suffice to provide every new laborer reaching the aforesaid places with a certificate issued ad hoc by the respective health officer, stating under his own responsibility that the person, after four consecutive examinations of his feces, made at intervals of four days, is free from uncinaria.

It might be argued that this measure would force the laborer to lose 16 days' wages. On this point the great advantages of compulsory disease insurance which provides for these cases are clearly seen; but if said laborer is sufficiently instructed, as desirable, by means of wide distribution of sanitary circulars similar to the one issued by the department and profusely distributed among the rural population during the current year, and by the incessant propaganda of the health inspectors—a powerful reason, among others, for the creation of said offices even in the smallest localities—it is to be expected that the laborer will willingly accept the sacrifice in exchange for the health and vigor which will be his; for the 16 days, apparently lost, followed by a tonic and restorative treatment, are the best guaranty of the ulterior efficiency of his powers, which will then have the nature of certain permanency.

To obtain the second object, that is the protection of laborers free from the disease who work or live on infected plantations or country districts, the preliminary investigation above mentioned should be made. Said investigation will show a greater or lesser number of infected persons. In such case measures must be more strict in order to prevent contagion of persons not affected by the disease. The most radical and efficacious measure would be the immediate confinement of patients in hospitals, but such measure would be impracticable if the disease is allowed to take an absolute character, because of the lack of means with which to carry out said measure which is possible under determined conditions in certain localities and within the limits of possibility and effectiveness so long as the disease is of relative nature.

In default of confinement in hospitals, contamination of laborers free from the disease will be prevented by isolating them in barracks, separating them at work from their infected companions, stimulating them to follow the advice in regard to drinking water, wearing of shoes, and deposit of feces, etc., contained in the above-mentioned circulars.

As to persons already infected compulsory curative treatment should be put into practice without delay. They should be separated from uninfected persons and carefully watched, and also made to take the prescribed medicines, besides reporting at the house of the owner of the estate, of the district commissioner, at the rural school, or at any other convenient or easily accessible place where they would receive the pharmacological agents and hygienic advice necessary to combat the disease. When circumstances require they should be attended at their respective homes, and having been cured, there should be issued to them the corresponding certificate of freedom from uncinaria.

In synthesis: The fight against uncinariasis consists of getting hold of the patient; discovering the infected among those not affected; preventing contamination of his companions; letting him go free when radically cured; and adhering strictly to the following:



## PROGRAM.

The local health officer (a physician) in towns where such office exists shall have charge, in addition to his sanitary duties, of the anemia dispensary which at the same time shall be a tuberculosis and malaria dispensary. He shall make microscopic and physical examinations of these transmissible diseases, for the purposes of a positive differential diagnosis, a fundamental element of the respective indices of morbidity, and of the quickest and most efficacious treatment.

The dispensary shall be open to the public every Thursday from 8.30 to 11.30 a. m. for all persons residing at a distance not greater than four kilometers from the corresponding town. In the rural zones of these localities the inspector of health shall act instead of the aforesaid officer, and shall make trips to said rural zones every four days to perform the duties referred to, for which he must be efficiently prepared, as well as for the purposes of the preliminary investigation already mentioned, which will constitute the medical geography of ankylostomiasis in Porto Rico. This work shall in each case start at one sole estate or district, commencing at such as are located within the aforesaid four kilometers, and not to proceed to others until the census of exemption of the first is completed, and so on.

Where there is no local health officer (a physician) the respective inspector shall assume his own and the officer's duties, and if in computing the four-day periods they should coincide with Thursdays, he shall postpone his trip to the ensuing Friday, again commencing his count of periods of four days.

The special anemia physician shall act in the locality where he resides, and shall adhere to a program identical with that laid down for health inspectors who shall aid said physician in determined cases, though this shall not be a daily or regular duty.

Hence, anemia officers are divided into three classes, to wit:

1. Local health officer (physician) residing in San Juan, Caguas, Humacao, Guayama, Ponce, Mayaguez, Aguadilla, and Arecibo.

2. Special anemia physicians residing in Utuado, Lares, and Morovis.

3. Health inspectors in all towns of the island, and in the island of Vieques.

The department has in project two hospitals for uncinariasis: One in Utuado and the other in Lares.

There are at present in absolutely regular operation 37 dispensaries in the following towns: Adjuntas, Aguas Buenas, Aibonito, Anasco, Arecibo, Arroyo, Bayamon, Barceloneta, Barranquitas, Caguas, Camuy, Cayey, Ciales (Fronton), Cidra, Comerio, Corozal, Guayama, Humacao, Juncos, Lares, Las Marias, Maricao, Mayaguez, Morovis, Patillas, Ponce, Rio Grande, Salinas, San German, San Lorenzo, San Sebastian (Sierra Baja), Utuado, Vega Baja, Villalba, Yabucoa, and Yauco.

It is pertinent to state that as a result of the new organization where 9,875 patients applied at the dispensaries in 1916-17, 20,590 applied in the current year, 1917-18, or 10,715 patients more. These figures constitute the most eloquent proof of undeniable success.

*Total of uncinariasis treated monthly during the fiscal year 1917-18.*

Month of—		Month of—	
July.....	1,119	February.....	2,010
August.....	1,035	March.....	1,954
September.....	1,031	April.....	2,549
October.....	1,285	May.....	3,315
November.....	1,152	June.....	2,761
December.....	1,090		
January.....	1,239	Total.....	20,590

This number of patients is distributed in accordance with the following classification:

	Number.	Percentage.
Color:		
White.....	17,066	82.88
Colored.....	3,524	17.12
Total.....	20,590	100.00
Sex:		
Males.....	11,133	54.06
Females.....	9,457	45.94
Total.....	20,590	100.00
Age:		
1 year.....		
1 to 9 years.....	2,453	11.92
10 to 19 years.....	7,506	36.40
20 to 39 years.....	6,665	32.38
40 to 59 years.....	3,299	15.92
Over 60 years.....	697	3.38
Total.....	20,590	100.00

## TYPHOID FEVER.

During the fiscal year 177 deaths from dothienenteria were recorded. This number, with certain exceptions, may be considered true and effective if it is borne in mind that the clinical diagnosis was confined in the greater number of cases by Widal's seroreaction, though in a few others the result of the test was negative. To avoid such errors, it is recommended that in future seroreaction and technical diazo-reaction be practiced jointly. The latter has fallen into disuse in Porto Rico, whereas in other countries it plays a very important rôle in diagnosing typhoid fever.

It has the advantage of making the disease ostensible sooner than Widal's test. In the great majority of cases it manifests itself between the fourth and tenth days, and in some cases on the third day.

And the more intense the infection the sooner does the diazo-reaction appear. It is, notwithstanding, of great value in suspicious cases, although within discreet limitations of fallibility.

It is not "pagtonomica" of typhoid fever, but it is at least as constant as Widal's test, so that when both are either positive or negative the diagnosis may be so held.

As information it is pertinent to make known a new test for typhoid fever. This test is especially employed in cantonments when soldiers have been inoculated against the disease and paratyphoids A and B. This test consists of hypodermic injections of sulphate of atropin adjusted to special technical procedure.

Hemoculture is recommendable only in hospitals.

Mortality due to typhoid fever absolute as well as relative—which became decidedly lower subsequent to 1913-14 and constituted real progress—has increased noticeably in the island during the year 1917-18, especially in the city of San Juan. This was due to the intensification of the common causes of the disease by the dislodgement of great quantities of earth at the Seboruco for the purpose of building Camp Las Casas; by the work on the sewerage system in Miramar; by the large number of latrines in bad condition, which were necessarily destroyed; by the garbage dump at Puerta de Tierra, which is an immense breeding place for flies (the municipality of San Juan not having constructed the garbage crematory), which spread the pathogenic agent throughout different parts of the city; by the undeniable presence of persons conveying the bacilli, who came to form the conglomerate of operators (two thousand or more) employed at said camp, and as a general cause throughout the territory by the present food régime of the inhabitants, lowered in quantity and quality by reason of the war, the direct and immediate result of such régime being a descent of the power of organic resistance to a lower level, so that it can hardly stop the advance of its natural enemies.

*Deaths from typhoid fever, 1913-18.*

	1913-14	1914-15	1915-16	1916-17	1917-18
Average per thousand over population.....	0.56	0.10	0.10	0.08	0.15
Percentage over mortality.....	.60	.51	.35	.49	.58
Number of deaths.....	130	121	94	171	182

*Monthly deaths from typhoid fever, 1913-18.*

(Estimated population, 70,536.)

	1913-14	1914-15	1915-16	1916-17	1917-18
July.....	1	1	3	1	4
August.....			1	3	3
September.....				2	2
October.....	3	4			
November.....		3			
December.....					1
January.....					
February.....		1			2
March.....	3	2	2	1	3
April.....		1	3	4	8
May.....	2		1	3	
June.....	3		2	4	
Total.....	12	12	12	19	23

San German, Sabana Grande, Utuado, Guayanilla, Carolina, Rio Piedras, Mayaguez, Guayama, and Ciales have had the benefit of triple antityphoid vaccination.

One thousand two hundred and seventy-four persons were inoculated in San Juan, the most intense action taken in Porto Rico along the line of typhoid fever prophylaxis. To this action, together with other preventive measures, is due the extinction of the epidemic outbreak which appeared in February and acquired a maximum of potentiality in April, having disappeared so rapidly that no deaths were registered in either May or June.

*Summary of persons vaccinated against typhoid fever in San Juan, 1917-18.*

Less than 1 year of age.....	4
1 to 5 years.....	176
5 to 10 years.....	374
10 to 20 years.....	538
30 to 50 years and over.....	182
<b>Total.....</b>	<b>1,274</b>
White.....	390
Negroes.....	884
<b>Total.....</b>	<b>1,274</b>
Male.....	516
Female.....	758
<b>Total.....</b>	<b>1,274</b>

RESIDENCES.

Lopez Landron Street.....	7
Chicharo Street.....	373
Calma Street.....	53
Pulgner Street.....	58
Calmañil Street.....	25
Carretera.....	1
House No. 274, stop 25.....	3
Machuchal Street.....	96
21 Cruz Street.....	17
68 San Sebastian Street.....	23
Seboruco Street.....	74
Tranquilidad Street.....	46
San Juan Moderno.....	9
Seboruco (near the camp).....	63
3 Loiza Street.....	1
2 Loiza Street.....	52
Carretera Seboruco.....	107
110 Luna Street.....	48
14 San Jose Street.....	10
Asuncion Episcopal School.....	70
Pedro Goyco School.....	73
Ruis Belvis School.....	63
<b>Total.....</b>	<b>1,274</b>

Great importance is given in this report to chronic carriers of bacilli, investigations made in Europe and America, which allow of the following principle, being borne in mind: The greater the number of carriers of a pathogenic agent distributed in a locality, the greater the extent of contagion. Epidemics are in direct relation not only to the number of predisposed organisms, but to the number of conveyors. Malaria, for example, diminishes and disappears from a region when anopheles decrease in number or are extinguished, or when patients are treated with quinine.

LEPROSY.

On June 30 last there were in confinement in the leper colony on Cabras Island 39 patients, classified as follows:

<b>BY SEXES.</b>	
Female.....	26
Male.....	13
	<b>39</b>
<b>BY RACES.</b>	
White.....	21
Colored.....	18
	<b>39</b>
<b>BY AGES.</b>	
1 to 10 years.....	1
10 to 20 years.....	8
20 to 30 years.....	14
30 to 50 years.....	14
50 to 70 years.....	2
	<b>39</b>

## FROM

Aguadilla.....	1	San Juan.....	11
Coamo.....	1	Vega Baja.....	4
Naguabo.....	4	Bayamon.....	1
Rio Grande.....	1	Mayaguez.....	1
Afasco.....	1	Ponce.....	6
Guayama.....	1	Trujillo Alto.....	1
Patillas.....	7		

There were but 35 patients in the fiscal year 1916-17. The increase of 4 in the year 1917-18 is wholly explainable because of strict compliance with regulations No. 43 relative to transmissible diseases. Said regulations were more strictly applied to leprosy than to any other of said diseases.

Now then, supposing that eleven lepers escaped the scrupulous investigation made by the local health officers and by the inspectors with the aid of the public converted into sanitary police because of its horror of the terrible disease, the result would be 50 lepers, a number so small as to allow of the statement that leprosy is but little spread in Porto Rico, an island of 1,243,308 inhabitants, when compared with the 2,000 lepers of Cuba which has 3,000,000 inhabitants, and the 25,000 lepers of Colombia with a population of 4,000,000.

The history of leprosy in Porto Rico is, with very slight peculiarities, the same as that of framnesia or buba, with which it was often confounded. Its appearance in the Island was coincident to the introduction of African slaves.

The disease was always looked upon with too much indifference, and only attracted the attention of the political administrative body known as the diputacion provincial in the year 1870. Said body recommended the establishment of a hospital for lepers, but the project was never realized for lack of means.

The problem in all its seriousness remained pending. Knowing the importance of the matter, physicians obtained the approval of an ordinance allowing each municipality to isolate and care for its own sick. This measure was wholly unsuccessful.

In 1880 the municipality of San Juan constructed a leper asylum on a site back of the present penitentiary. Said asylum sheltered six patients who were supported on the small appropriation of \$6 a month. They lived wholly unrestricted, and freely idled around the stores of the district of Marina.

In 1895 the diputacion provincial renewed its attempt and selected a site on the northern coast, 10 miles to the east of San Juan, but the project was not carried out for lack of governmental support.

Thus did things continue till February, 1899, when Gen. Henry created a board of health which investigated the cases of leprosy existing in the island, the result being 13 cases in San Juan and 3 in Ponce, a total of 16. From that time on the confined were strictly isolated.

A commission was at the same time appointed to draw up a report on the condition of the asylum. Said commission recommended San Luis Key as a good site for the leper colony. This island is situated near the east coast of Porto Rico at a distance of 80 miles from San Juan by sea and of 150 miles from Ponce. It is near the island of Culebra. This time also the project failed for lack of means.

Upon the organization of the board of charities in August, 1899, the leper colony was placed under their jurisdiction. The victims of the cyclone of San Ciriaco attracted entire attention, but although the hurricane left the building uninhabitable, the patients were lodged in the cellar of the penitentiary in such anomalous position as to give rise for the first time to the idea of confinement on Cabras Island. Said idea was abandoned and the old hospital repaired, and on November 11 of the same year the lepers were again taken to this place.

Later on Castillo Island at Punta Salinas and its adaptability to the needs of the institution were thought of. The cost was estimated at \$71,160.75. This project was also given up and the lepers were finally confined on Cabras Island where they are still held.

From the very beginning the undersigned commissioner's attention was attracted by the anomalous conditions prevailing at leper the colony the idea was conceived of transferring the same to some other more appropriate place, which he requested of the legislature assembly in due course of time.

In February, 1918, a letter was addressed to the Governor of Porto Rico in the following or similar terms: There exists in Porto Rico a charitable institution depending on the department of health and known as the leper colony, which is located on Cabras Island at the entrance to San Juan bay and continuously washed by the breakers of a constant and violent sea. This island measures 600 meters in length by 50 in width at some places and nearly 100 at others.

There are confined on this island 39 lepers who are the subject of prejudices and worry not wholly warranted in modern times. For lack of space on the island it has been necessary to confine temporarily in the quarantine hospital two children and one adult suffering from leprosy.

The site of this colony is in flagrant conflict with the most rudimentary principles of medicine, philanthropy, social technique, and economy. The imperative whim of routinary isolation is the only reason adducible for the establishment of the leper colony in such an unfortunately selected place.

From the medical point of view the place is inconsistent with the purposes of medical treatment by reason of the deplorable elements constituting the surroundings of the island, which is unprovided with the most elementary needs, the least comfort, and the most rudimentary appliances sanctioned by modern sanitary science which in other countries are found in hospitable institutions of this nature.

Moreover, the narrowness of the rooms, the lack of baths because of the utter impossibility of constructing tanks, the lack of space for recreation, and the total absence of trees, oblige the patients to remain in their cells for protection against the sun and the water atomized by waves which on striking the rocks saturate the air with chloride of sodium, an agent that by stimulating the skin ulcers and the mucous membranes determines a highly pernicious action through phenomena of electrolysis and spectral light which hasten the evolutive progress of the disease, generally slow and tardy in other more hygienic and appropriate environment. It suffices to state in this connection that in terrestrial leper asylums, mere contact with the air, even though of normal chemical composition, provokes rapidity of evolution, it being necessary to protect the affected parts by means of ointments, liniments, and collodion.

On the other hand, of the two factors invoked, inheritance and contagion, to which transmission of the disease is attributed, the first, inheritance, according to the most eminent leprologists, whether it be direct or alternate, is of the greatest importance, though we should not deny the possibility of contagion by direct or immediate contact or by means of some intermediary, such as blood-sucking insects, fleas, bedbugs, etc., or by determined classes of lice. Such transmissibility should be elucidated, especially if we bear in mind the diseases of leprosy aspect in animals, especially rats.

Isolation under such conditions is little in harmony not only with modern scientific ideas but with the sentiment of philanthropy, for it unites the impulse of well-understood charity to no sanitary advantage whatever.

Considering this matter from a modern and liberal sociotechnical viewpoint, since we are much beyond the medieval times when the religious fanaticism ruled that admitted of diseases sent by Providence as heavenly punishment, and the unfortunate sick were rejected from the bosom of society, and bearing in mind that at present we are guided by a Christian spirit, it must be understood that lepers are worthy of the greatest solicitude by reason of their great misfortune, there existing, therefore, no reason justifying their deportation, which is as efficacious as it is inhumane. Leprosy should not be of the nature of perpetual prisons on islands or keys, but should have the character of small towns with such conditions of life that the measures adopted may be voluntarily adopted by the lepers.

Economically the colony on Cabras Island is a lamentable error. Said island is sterile and without water and produces nothing. On other lands the colony could, by discreet exploitation, be made nearly self-supporting.

The arm of the sea between Cabras Island and San Juan, almost always rough, does not allow of assiduous, solicitous, and methodical medical attendance because of the danger of crossing it. Besides previous accidents, the manager of the colony and another employee were drowned recently.

In view of the above and other weightier reasons, this department, desirous of improving the conditions in which said patients live, suggests the idea of requesting the legislative assembly, at the meeting now in session, to appropriate or set aside the amount necessary to transfer the colony to some other place where patients can be scientifically isolated, and which would not be in conflict with deep-rooted ideas arising from the repulsive aspect of the disease, though proper for the habitation of human beings. The degree of contagion of leprosy is far from being as great as that of tuberculosis, a transmissible disease allowed certain privileges, since it has up to the present time been the object of a great sanitary liberality, permitting patients to walk the streets in urban centers and leaving on said streets sinister signs of their passage. Such tolerance is unjust, illegitimate, and inconceivable. It can not and must not subsist, no matter how much tuberculosis may be poetized, because the romanticism of the disease is false. It has been dramatized and written into novels, while lepers, because of absurd atavistic ideas are considered as beings accursed, who are hardly entitled quietly to enjoy their own resignation.

Another communication, addressed to the governor on February 15 of the current year, which reads as follows, corroborates the preceding statement:

FEBRUARY 15, 1918.

The honorable the GOVERNOR OF PORTO RICO,  
San Juan, P. R.

SIR: To confirm and strengthen the particulars of a communication addressed to you on the 13th instant, relative to the imperious urgency of the transfer of the leper colony from Cabras Island to an appropriate place of the nature of the institution on the island of San Juan, I take pleasure in inclosing copy of a letter addressed by me to-day to the senate committee on education, health, and charities, in connection with this matter, which entirely holds the attention of the public, which is greatly interested in the solution of this problem, with its double aspect of a hygienic, social, and charitable and philanthropic question.

On the other hand, at the interview referred to, I have been led to believe that the senate is disposed to consider this matter with preference upon your slightest suggestion.

Respectfully,

A. RUIZ SOLER,  
Commissioner of Health.

It is also pertinent to transcribe the following communication:

FEBRUARY 15, 1918.

SENATE COMMITTEE ON EDUCATION, HEALTH, AND CHARITIES,  
San Juan, P. R.

In consonance with the preliminary conditions established at the hearing granted me by your committee this morning, I inclose an estimate, drafted with the greatest economy so as to make it passable, for the purpose of immediately transferring the leper colony at present established on Cabras Island at the entrance to San Juan Bay to an adequate place on the island which shall meet specific conditions as to site and easy access, which conditions must in no case be overlooked.

Respectfully,

A. RUIZ SOLER,  
Commissioner of Health.

*Estimate for the construction of a modern leprose, including land, material, and labor.*

All buildings are of reinforced concrete and roofed with asphalt shingles. The flooring of each department is indicated.

I. Lands, roads, streets, cleaning, fencing, etc. (not less than 40 acres).....	\$15,000.00
II. Administration building for the superintendent and his family; wooden floors in dormitories and parlor, others of mosaic.....	3,500.00
III. Employees' building (6 men), 6 by 8 meters by 3.25 high; wooden floors.....	2,000.00
IV. Employees' building (6 women), 6 by 8 meters by 3.25 high; wooden floors.....	2,000.00
V. Patients' dining room, 8 by 10 meters by 3.25 high; mosaic floors.....	3,000.00
VI. Employees' dining room, 4 by 6 meters by 3.25 high; mosaic floors.....	1,000.00
VII. Kitchen and storeroom, 6 by 6 by 3.25 meters; mosaic floors.....	1,700.00
VIII. Laundry and wardrobe, 8 by 12 by 3.25 meters; mosaic laundry floor and wooden floor in wardrobe.....	3,800.00
IX. 25 small houses for two patients each, 4 by 8 by 4 meters; mosaic floors and complete sanitary installations (see accompanying plan), at \$1,500 each.....	37,500.00
X. Small house for the deposit of corpses, 4 by 3 by 3 meters; concrete floor.....	1,000.00
XI. Stable and coach house, wooden and concrete, 5 by 7 by 3.25 meters; concrete floor.....	500.00
XII. Room for treatment of patients, 4 by 6 by 3.25 meters; mosaic floor.....	1,000.00
XIII. Water installation, 2-inch main pipe, distance from town having aqueduct approximately 3 kilometers.....	3,000.00
XIV. Electrical installation and telephone.....	600.00
Total.....	75,800.00

The legislative assembly at its last session passed house bill 32 appropriating the sum of \$50,000 for the construction of a leprose to which the patients confined in the leper colony on Cabras Island should be transferred.

The bill did not become law for lack of the governor's signature within the period determined by statute. It should be stated, however, that said authority is greatly interested in the transfer, and if he did not approve the bill it was due to defects of form and substance which might create future conflict for those charged with the execution of the law.

The governor has requested the commissioner of health to prepare a bill and estimate, with the object of recommending the same in his first message to the legislature.

As a preliminary measure the ~~commissioner~~ of health requested the opinion of the insular board of health, which favors the transfer of the leper colony, as may be seen in their report forming part of this annual report.

The idea of the transfer being strengthened by said wise official opinion, and complying with the governor's request, it behooves the commissioner to avail himself of the opportunity offered by this report to suggest to the governor that he recommend to the legislature the estimate above copied, construction to be in accordance with accompanying plans. Said estimate was submitted to the senate committee on education, health, and charities.

As to the land for the site of the colony, there is no doubt that it will be easy to obtain, provided the sum of \$15,000, mentioned in the estimate, is appropriated.

#### TROPICAL FRAMBESIA, PIAN, YAW, OR BUBA.

In including this simple monograph in its annual report the department of health of Porto Rico has no other purpose than to place in evidence the supreme importance of compulsory reports of transmissible diseases in sanitary science. This is a fundamental and indispensable requisite without which it is absolutely impossible to obtain an exact index and accurate statistics of morbidity, which are the only safe guides to prophylaxis and the eradication of said diseases.

The department does not pretend to set forth new ideas on the etiology, transmissibility, immunity, symptomatology, diagnosis, prognosis, mortality, and treatment of this disease. It wishes at most to recall knowledge already obtained and to rectify old conceptions. The works of Patrick Manson and of Aldo Castellani in collaboration with Albert J. Chalmers are the last word on this nosologic entity, and unquestionably form text and consultation books above all praise.

Neither does the department purpose to augment the medical literature of Porto Rico. It will be satisfied if from the perusal of this work there arises a favorable argument legitimating its action, since by virtue of the new organic act governing the island this branch of the public service has been placed in native hands and charged with carrying out high sociotechnical functions and functions of modern hygiene which must be translated into works of patriotism and honor for the people of Porto Rico.

The disease now known as buba in Porto Rico was known before the importation of negro slaves from Guinea and the Congo; that is, until long after the disappearance of the indigenous race, due to historic social reasons, the analysis of which would be inopportune here.

To the end pursued, however, it is important to state that the first importation of slaves in Porto Rico was coincident with the establishment of the capital on its present site. This fact may be proved by reading the illustrious historian Salvador Brau, who speaks of Bishop Alonso Manso's memorial of 1521 requesting authorization to purchase 20 negroes and bring them to Porto Rico from Hispaniola, because death had deprived him of the Indians that the King had granted him for his sustenance.

From the aforesaid year to 1524 nothing further is said in regard to African slaves; but the Indians having become extinct authorization for the importation of inexperienced negroes (bozales) was requested. Such importation was not put into practice because the extinction of the Indians was found to be untrue, as may be deduced from the privileges granted them in 1544 by the Emperor Carlos V.

Up to this time no epidemics other than smallpox had been known in Porto Rico; but although José Julián Acosta speaks of epidemics of bubas, he sets them down toward the end of the sixteenth century, when the number of negro slaves was already large. However, he erroneously distinguishes bubas from pian, the latter being the name given to the disease in the French colonies.

Up to the beginning of the seventeenth century no true and positive epidemic of frambesia had been recorded, but they became intense in the eighteenth century and in the first half of the nineteenth. The majority of these epidemics developed on the vessels transporting the unhappy victims to Porto Rico, and were spread among others of the same race who worked on sugar estates—the only known agricultural industry—to which said victims were assigned with but few exceptions, who were engaged as domestics.

These epidemics terrorized the whites, who found themselves obliged to establish emergency hospitals for the isolation and empiric treatment of patients. This treatment touched on superstition and not even attenuate the syndrome of the disease, which caused great mortality, notwithstanding its little actual seriousness and proved benignity. When a rational and specific treatment in harmony with medical progress and on a basis of potassium iodid and mercurial preparations was in time commenced the percentage of mortality began to decrease considerably to minimum figures.

Thus treated, human foci of contagion became rarer. The negroes, having become emancipated by the abolition law of March 22, 1873, spread and scattered among the other inhabitants, and perhaps through a phenomenon of symbiosis, the disease seemed to have disappeared; but recent facts have demonstrated that such extinction was more apparent than real. The most that can be admitted is that it went unnoticed or was confounded with cutaneous syphilis on its propagation to whites; but not that it was latent, if this were possible, for this is a condition unnecessary in explaining outbreaks which have not ceased to be observed.

In those distant times, and even in times nearer to our own, to say *buba* in Porto Rico was equivalent to and produced the same terror as the word pest or cholera. Such was panic created by the repulsive disease—increased to gigantic proportions by the false reflections of popular imagination—that even the best tempered spirits admitted that its contagiousness was so alarming and virulent that it sufficed to step on a spot previously trodden by a patient unavoidably to contract the disease.

Time passed, and with it went those hysterisms of public opinion which, having reached a point of deplorable optimism, came to consider the disease as wholly extinct and eradicated. Such more or less numerous cases as from time to time appeared in consultation offices or were attended in private practice failed to awaken clinical interest, since they were considered as cutaneous syphilis. Without further analysis or bacteriologic examination, and without further thought, the specific treatment for syphilis, identical with that for frambesia, was employed, and the consequent success of such treatment became the best and strongest argument in favor of the erroneous diagnosis "*ex nocentibus, ex jubañtibus*."

And the disease existed and continues to exist, not in a latent state, but awake, throbbing and active, showing itself by more or less intensive outbreaks in determined jurisdictions among which are Carolina, Peñuelas, Coamo, and specially Isabela. This latter town and certain of its wards, Bajuras and Jobos, for instance, were always the most afflicted, undoubtedly because a great many years ago there existed in said locality a sugar factory owned by a Mr. Labadie, where there was a large contingent of slaves. After their emancipation many Africans continued to reside on the plantation, and even at the present time some of the race may be counted among the inhabitants.

In fact, about the year 1902 or 1903, while Licentiate in Pharmacy Juan Monclova was president of the school board of Isabela, a severe epidemic developed in the rural school of Jobos, to the extent that all parents withdrew their children therefrom.

The then director of health, our unforgettable compatriot, Dr. Ricardo Hernández Salgado, took a hand in the matter and accompanied by Dr. José Lugo-Viña, medical inspector of the northern district, proceeded to the place. They erroneously diagnosed the disease as cutaneous syphilis, and consistent in their error, treated it with potassium iodid and biiodid of mercury, internally. As a topica they employed a salve composed of protochlorid of mercury and vaseline. And, as often before, the disease responded to the treatment, the diagnosis being held as proved. This would not have happened if it had then been possible to make due records of the cases by means of laboratory proceedings and technique, as has been done at present, precisely by a nephew of the aforesaid director of health, Dr. Francisco Hernández y Hernández, chief of the biologic laboratory of the department of health.

The officers above referred to limited their pharmacologic action according to the well known clinic-therapeutic aphorism: "*Quod sufficit ad curandum sufficit ad cognoscendum*."

Having taken this stand, Licentiate Monclova prepared great quantities of Gilbert's sirup and of the above-mentioned salve which caused the outbreaks to disappear temporarily, only to appear later on at intervals of different periodicity and duration.

Ignoring that the pharmacologic treatment of frambesia is identical with that of syphilis, an empiric treatment was put into practice. The most eloquent proof of the above fact is the quick and permanent success at present obtained by the use of neosalvarsan. Such success has reached the extent that hospitals of from three to four hundred patients suffering from *buba* have been closed five or six weeks after the use of arsenobenzol was commenced.

Two or three years later, Dr. González, a physician in the charity service, continued the work of the board of health upon a new outbreak of the disease. On this occasion one of the victims was Mr. José Valeriano Pérez, teacher of the school referred to above, the destruction of which was ordered since it was considered as an inextinguishable focus of infection.

The disease began to decline and was not again mentioned till the beginning of November, 1917, and then as the result of a circular issued by the department of health in September of the same year, in which circular attending physicians and the officers of the department were required strictly to comply with the provisions of



section 28 of the health law in force, and with the provisions of articles 3, 4, and 5 of regulation No. 43, relative to transmissible diseases. This circular determined a report by the health inspector of Isabela, on November 10, of two cases of buba existing in the ward of Jobos of said jurisdiction.

The head of the local health service of Aguadilla, Dr. Martín de la Rosa, was commissioned to proceed to Jobos to make a clinical investigation which brought out the existence of some 40 cases and confirmed the diagnosis.

As a consequence the present commissioner of health and the chief of the division of transmissible diseases and statistics made a trip to Isabela, where they selected the 10 most typical cases in the different stages of the disease. These cases were sent to the quarantine hospital at San Juan where together with 11 more admitted later they formed the clinic and bacteriological elements of this monograph.

In synthesis: *Framboesia tropica* or buba is an exotic disease naturalized in Porto Rico from the time of the importation of negro slaves into the Antilles.

Said disease is of specific, inoculable, infectocontagious nature, its morbid agent being a treponema (*T. pertenue*, *Spirochoeta pallida*) very much like that of syphilis (fig. 1).

The disease is characterized by an undefined period of incubation commonly followed by hyperthermia (38 to 39°), intense rheumatic pains, and the appearance of a peculiar granuloeruptive dermatosis somewhat similar to muriform tuberculosis and of a papillomatous structure clinically resembling hardened furuncles, which makes it a morbid entity having its own typical nosology, and completely differentiated from other diseases with which it has been confounded.

Said papilloma, at first alone, and almost always extragenital, multiplies later on and becomes generalized till it resembles a planet surrounded by numerous satellites (fig. 2).

The disease is different from syphilis, with which it can not be even remotely identified, since they may and but too frequently do coexist. Furthermore, neither disease immunizes from the other. Many syphilitics cured by salvarsan are shortly afterwards attacked by frambesia and vice versa.

Like syphilis, frambesia is treated by means of potassium iodid and mercurials, atoxyl and arsenobenzol, which are as specific for one disease as for the other.

The term frambesia answers to the similarity of the initial papilloma to a raspberry. Certain authors call it tropical polipapilloma. In the English colonies the disease is known as yaw; in the French, as pian; in the Dutch, as tonga; in Ceylon, as parangi, and in Porto Rico and Venezuela, as buba (fig. 3).

That this disease is the clinical expression of the presence of treponema pertenue in the human body is an incontrovertible fact. By means of Giemsa's and Lishman's coloration said treponema was found by Castellani in 1905 in the frottis of the affected tissues or in the bottom of the ulcers or granulomata to be completely distinct from that of syphilis, discovered by Shaudin in the same year.

Treponema pertenue is also found in the lymphatic ganglions and in the spleen. Microscopic examination of the blood has not as yet revealed it, but if a monkey is inoculated with the blood of a patient suffering from the disease, the infection develops and the papillomata characterizing the infection in *Spirochoeta pallida* appear.

Experimental inoculation; the manner of appearance; the place of initial manifestation; the different stages of the disease, and a multitude of other clinical circumstances, leave no doubt whatever as to the real difference between the two nosologic entities frambesia and syphilis, notwithstanding their many similar conditions. Experiments on animals have established the coexistence of both diseases (figs. 4 and 5).

Flies are assigned a most important rôle in the transmission of the disease, since they transport the secretions from the frambesial lesions to the erosions and ulcerations of persons free from the disease.

The following are worthy of mention as predisposing causes: Physiological weakness; poor hygienic conditions of homes or of the site thereof, and above all, poor food. It is impossible to specify the food or foodstuff favoring its development, but it is quite certain that fowls used as food produce this effect.

All authors agree to the fact that the primary extragenital lesion is histologically identical with those of the second stage in the great majority of cases. In both stages it is easy to find endothelial proliferations or cellular infiltrations analogous to those of syphilis. Swollen degenerated polymorphonuclear cells and granular remains accompanied by true edemas and dilatation of the capillaries and lymphatic glands are found in the corium. (fig. 6).

The clinical course of frambesia comprises three periods: The first beginning two or three weeks after infection is characterized by a papular initial lesion which later on takes the fungoid aspect of the typical frambesial tubercule. This stage is fol-

lowed by a second, during which the eruption becomes general, and this second stage is followed by a third, characterized by gummy nodules with subsequent ulceration, indurated granulomata on the soles of the feet (called clavos), frambesial onyxia and alopecia as in syphilis (fig. 7).

Some authors have pretended to establish that under the names of yaw, bubas, and pian three different diseases have been unified. The experimental and comparative investigations made by Castellani have brought him to the conclusion that monkeys inoculated with the products of Ceylon frambesia have become simultaneously immune from bubas and pian, and vice versa.

The prophylactic measures are all such special measures as will prevent contagion. Isolation of patients; destruction of clothing and articles used by them; antiseptic topicals on the ulcers; disinfection and even destruction by fire of houses, huts, and shacks notoriously infected.

Treatment is reduced to good food, tonics, restoratives, dechloruration, diaphoretics to stimulate the eruption, warm baths and emulgent drinks. When the initial manifestation appears mercurials, potassium iodid, and arsenical preparations should be employed without loss of time, according to the nature of the case.

At present neosalvarsan is being used with surprising success in intravenous injections in adults and in enemas in children (other figures).

#### DIVISION OF TRANSMISSIBLE DISEASES AND STATISTICS.

SAN JUAN, P. R., July 8, 1918.

The honorable the COMMISSIONER OF HEALTH,  
San Juan, P. R.

SIR: It is very satisfactory to state that during the fiscal year 1917-18 the reports of transmissible diseases have increased by about 50 per cent over those received during the previous year, as a result, no doubt, of the active efforts of the department, either by means of circular letters to the physicians, or by private letters, or through special investigations, on one hand; and on the other, due to the spontaneous and patriotic cooperation rendered by the medical profession, who, with rare exceptions, have complied with this requirement of the law, thus facilitating the work of this office. However, it is to be hoped that this cooperation will become even more efficient the coming year, so that knowledge may be had of the existence of each case of disease in each municipality without being compelled to wait for the death certificate to secure data of those cases overlooked by the physicians, who are not only in charge of the treatment of the sick but of the protection of the lives of those in health by means of prophylactic measures of hygiene and sanitation, which, necessarily, do not pertain to this service.

#### MEASLES.

This disease has invaded all of the towns and barrios of the island, this office having received 5,233 reports, while in the past year (1916-17), only 3,670 were received, probably due to the fact that physicians were not under the obligation to report same, as measles was not included among the notifiable diseases.

The cities and sections invaded by the disease were: Adjuntas, 102; Aguada, 22; Aguadilla, 96; Aguas Buenas, 12; Aibonito, 183; Anasco, 91; Arecibo, 13; Arroyo, 65; Barceloneta, 21; Barranquitas, 37; Barros, 14; Bayamon, 16; Caguas, 23; Camuy, 66; Cayey, 25; Ceiba, 2; Ciales, 17; Coamo, 159; Comerio, 44; Corozal, 11; Corado, 11; Fajardo, 123; Guaynabo, 2; Guanica, 2; Guayama, 358; Hatillo, 17; Hormigueros, 1; Humacao, 495; Isabela, 9; Juana Diaz, 110; Lajas, 29; Lares, 145; Loiza, 6; Las Piedras, 57; Manati, 11; Maricao, 27; Maunabo, 36; Mayaguez, 252; Moca, 2; Morovis, 6; Naguabo, 87; Patillas, 24; Penuelas, 116; Ponce, 309; Quebradillas, 118; Rincon, 38; Rio Grande, 22; Rio Piedras, 4; Sabana Grande, 29; Salinas, 390; San German, 112; San Juan, 41; San Lorenzo, 29; San Sebastian, 45; Santa Isabel, 29; Toa Alta, 10; Toa Baja, 18; Utuado, 339; Vega Alta, 6; Vega Baja, 67; Yabucoa, 295; Yauco, 216; and Vieques, 55.

There were 1,096 deaths registered, but it is pertinent to state that the majority of these deaths were due to condition in life and to complications rather than to the virulence of the nosological entity.

The department proceeded, after the appearance of the first epidemic outbreak, to open hospitals at Guayama, Aibonito, and Cayey and instructions were issued to furnish free milk to the indigents attacked by measles, which has prevented a large number of casualties and facilitated the cure of the majority of the cases, as may be deduced from the figures given above. The towns where milk was supplied for the nourishment of indigent patients from February of the current year to date

are the following: Arroyo, Barceloneta, Caguas, Camuy, Guayama, Humacao, Salinas, Penuelas, Quebradillas, Moca, Isabela, Naguabo, Sabana Grande, and San German.

This epidemic has been diminishing from day to day, thanks to the measures adopted, and in the month of June only 62 cases have been reported.

#### TUBERCULOSIS.

During the fiscal year 1917-18, 1,218 cases have been recorded in this office as against 831 in the year 1916-17, and 791 in 1915-16. The mortality this year is 2,505 as against 2,579 during the previous fiscal year. These figures show that there has been a great number of cases reported to this office, without any of those reported in previous years being included, all having been confirmed by biological analyses in the laboratory of this department. There must exist, however, a large number of unreported cases or those which refuse to send samples of sputum, as happened on one occasion when this office was compelled to intervene in an energetic manner so that the law might be complied with.

On account of the lack of hospitals for the treatment and education of tuberculosis patients, as well as the carelessness and neglect of the people in general, there exist a number of tuberculous persons who carry the infection from one place to another and transmit the disease to their neighbors. This is particularly so in those tenement houses lacking good sanitary condition, without ventilation, without light, damp and overcrowded with a larger number of inmates than those that should live therein according to law, which are the causes, especially in the large towns, of the growing and alarming increase of this disease which threatens, from the palace to the shanty, to extinguish the inhabitants of this island.

We invite the very careful attention of the Government to this matter, which because of its seriousness has alarmed this department, urging the adoption of measures of an economic nature to stop the overwhelming increase of the disease, and to prevent this people from being weakened and annihilated. This is needed, now more than ever, on account of the war, that the growing generation be strong and vigorous and able in its physical development to compete in endurance with the belligerent armies.

I take the liberty of inviting attention to the fact that in New Jersey a law was passed by the legislature, which President Wilson signed when he was governor of that State, whereby the segregation of tuberculous cases is made compulsory. This law, which no doubt marks the greatest progress so far made in legislation concerning tuberculosis, not only in the United States but in the whole world, provides that any tuberculous patient who does not comply with the regulations in the matter and who becomes a menace to the community shall, by order of the courts of justice, be compulsorily placed in institutions provided for the purpose. If such patients should refuse to comply with the regulations of the institution, they shall be isolated from other patients without being allowed to leave said institutions. The law also provides that all counties of the State of New Jersey shall, within six months from date of approval, establish hospitals or sanatoriums for the treatment and care of patients suffering from tuberculosis in each county. The State shall pay to each county the amount of \$3 a week for each person admitted to these institutions. It would be of great benefit to have similar legislation here, because we need it more than anybody else, and we would thus put an end to this miserable situation.

The department of health maintains a sanatorium for the tuberculous patients, but it is too small to admit the number of patients existing in Porto Rico. In spite of the scarcity of funds available and the small size of the institution, a good work is being carried on.

#### MALARIA.

After the interruption for one year of the campaign started by this department a few years ago against mosquitoes, this year, upon induction into his office as commissioner of health, Dr. Ruiz Soler resumed said campaign establishing a hospital at Barceloneta and a dispensary at Salinas for the treatment of malarial patients and at the same time to study the biological forms of the plasmodium de l'averan in the laboratory annexed to said hospital. Besides this the sanitary inspectors were used for investigation in the country not only of malarial cases but of mosquito breeding places. These breeding places were destroyed either by oiling or by means of drainage, which caused a decrease to 411 in the number of deaths due to this disease.

There were received in this office 2,700 malaria reports this year, confirmed by microscopical analyses, as against 406 in 1917 and 443 in 1916.

The number of deaths was 1,528, but it must be noted that in those cases where death certificates were issued without the patient having been seen the diagnosis

was made from the history of the case obtained from some relative, and in all probability when it was impossible to determine what disease a patient had died of the cause of death was attributed to malaria. This has been and is done frequently in cases of continuous fevers and low temperatures to solve the difficulty. It is to be hoped that continuing this campaign, with sufficient funds, we shall be able to eradicate malaria and other diseases transmitted by the mosquito when we shall have exterminated this harmful insect.

#### SMALLPOX.

Only three cases have occurred in all the island, one in Mayaguez, one in Toa Alta, and another in San Juan, in its mildest form and in persons already vaccinated and without a single case of death due to this cause having been recorded.

This condition of affairs is due to systematic vaccination work carried on all over the island mostly upon persons not previously vaccinated, especially children, and those already vaccinated but without success.

Vaccine has been sent to San Juan, Quebradillas, Camuy, Arroyo, Guayama, Bayamon, Caguas, Yauco, Yabucoa, Mayaguez, Maunabo, Morovis, Barceloneta, Arecibo, Toa Alta, Guaynabo, Juncos, Hatillo, Mumacao, Aguadilla, Naguabo, Vieques, and Orlebra, making a total of 10,345 points of vaccine. To date 9,693 have been vaccinated.

The department will continue the vaccination work systematically and in that way we shall be able to obtain absolute immunity against smallpox.

#### TYPHOID FEVER.

There is an increase in the number of reports of typhoid fever this fiscal year due to the endeavors of this department to have the physicians report transmissible-disease cases.

There have been 338 reports as against 168 in the previous year and 146 in 1916. There were 182 deaths this year as against 171 the past year and 94 the previous year, so that it appears that 50 per cent of the cases reported died, while last year about 95 per cent of the cases died. This indicates that not all of the existing cases were reported, or that cases were diagnosed as typhoid by reference after death, which were not really typhoid fever.

The investigations made in connection with the epidemic outbreak at San Juan showed that flies were the vectorial of the disease in the majority of the cases. In the cases occurring in the island direct contact and water were the causes of contagion.

The department of health ordered the vaccination with antityphoid virus of the members of the families of those attacked, and a total of 1,440 have been vaccinated to date; this stopped and terminated the epidemic in San Juan and the outbreaks of the disease in the rest of the island.

There were 1,274 vaccinated in San Juan and 166 on the island.

#### UNCINARIA.

This disease, prevailing among the peasants, caused by their not wearing shoes while working, and due to the fact that almost all farm lands are infected, especially up in the mountains, because of the lack of latrines in the rural sections, has resulted in 510 cases being reported from the island and San Juan.

The department, as reports were received from the different towns where the disease prevails, has established stations for the treatment of same, and there are 37 stations now in operation in the towns of Adjuntas, Aguas Buenas, Aibonito, Anasco, Arecibo, Arroyo, Barceloneta, Barranquitas, Bayamon, Caguas, Camuy, Cayey, Fronton (Ciales), Cidra, Comerio, Corozal, Guayama, Humacao, Juncos, Lares, Las Marias, Maricao, Mayaguez, Morovis, Patillas, Ponce, Rio Grande, Salinas, San German, San Lorenzo, San Sebastian, Sierra Baja, Utuado, Vega Baja, Villalba, Yabucoa, and Yauco.

To date 20,590 cases have been treated, as shown in the accompanying exhibit. Besides this 274 cases were treated at Barceloneta, which are not included in the above figures.

#### DIPHTHERIA.

There have been 128 cases of this disease reported at intervals this year from San Juan and the various other towns of the island and without this number constituting an epidemic. There were 50 deaths due to the disease as against 41 the previous year and 26 in 1915-16.

As may be noted, the mortality has decreased. The department has sent anti-diphtheria serum where necessary as a prophylactic measure to prevent its spread.

It would be advisable to obtain Schick's vaccine, so as to determine by means of same who are susceptible to diphtheria and who are not, and, of course, be able to immunize those susceptible to it, especially in public schools and institutions of a similar nature.

#### WHOOPING COUGH.

There have been 159 reports received in this office from the different towns, and the demographic chart shows a mortality of 198. The previous year (1917), 284 cases were reported and 176 in 1916. There were 329 deaths in 1917 and 107 in 1916.

As may be seen, whooping cough was diagnosed upon issuing the death certificate in a great number of cases not reported. The serum against this disease has given no conclusive results.

#### INFANTILE TETANUS.

There have been sent to this office 44 reports of infantile tetanus from various towns of the island and from San Juan during the year, as against 23 the previous year and 40 in 1916, while the number of deaths due to same this year amounts to 580, as against 347 the previous year. This notable discrepancy is due to the fact that these cases were not treated by physicians and died under the care of members of the family or unqualified midwives, who were not acquainted with asepsis and antiseptis methods for the treatment of the umbilical cord of the newly born. The diagnosis was made in the majority of cases by deduction after death and in accordance with the history of the case as related to the physician by a member of the family.

#### FILARIA.

Of this disease 57 cases have been reported, the majority of them from San Juan, as against 13 cases the previous year and 39 in 1916. There have been 10 deaths during this year without expression of the kind of complications attending the casualties.

#### OTHER TRANSMISSIBLE DISEASES.

There has been received an insignificant number of reports of leprosy, parotiditis, colibacillosis, cutaneous syphilis, pellagra, glanders, trachoma, ringworm, malignant postule, and dengue. There was one death from colibacillosis recorded.

#### BIRTH RATE.

The births this year were 43,261, as against 42,259 in the previous year, being an increase of 1,002.

#### MARRIAGES.

There have been 18,578 marriages, as against 17,628 last year, being an increase of 950.

#### STILLBIRTHS.

The number of stillbirths during the year ending June 30, 1918, is 3,797, as against 3,853, a resulting decrease of 56 during this year. In spite of the decrease in the number of stillbirths this year, the number that has taken place is surprising. What is the cause? Alcohol? Syphilis? Lack of proper nourishment? Imperfect physical development?

This matter deserves a thorough study, which the very limited space of this report does not permit discussing. However, the determining cause of this anomaly must be found.

#### GENERAL MORTALITY RATE.

In spite of the fact that the mortality rate in Porto Rico has somewhat declined, being 28.48 per thousand in 1916-17, as compared with about 27.70 per thousand in 1917-18, it is still too high, and consideration should be given, and is being given by this department, to the causes of this high mortality, for the purpose of reducing same and compelling a compliance with sanitary regulations and applying prophylactic measures wherever public health is endangered.

It is due to the climate and the poor endurance of the organism of the inhabitants of the island, especially of the peasant population, weakened by anemia of parasitic origin; the poor or improper nourishment; the lack of shoes to protect their feet, which offers an opportunity and opens a breach for the invasion of bacteria and parasites; the lack of protection against external agents in houses on the mountains inhabited by them, where the rain leaks through the roof, and without a floor pro-

tecting them from humidity; and in the cities, living in tenement houses, without light and ventilation, and in contact, in a good many instances, with cases of transmissible diseases. It may be that alcohol and fermented spirituous drinks have acted in a weakening manner upon such organisms, decreasing their endurance and predisposing them to diseases. The problem must be studied and action should be taken in an energetic manner, because, along with the loss of lives, goes the loss of millions of dollars to the country.

In the month of July, 1917, there were 4,081; in August, 3,646; in October, 3,272; in December, 2,981; in September, 2,977; in January, 2,967; in November, 2,864; March, 2,682; in February, 2,483; in May, 2,424; in April, 2,399; in June, 1,679. As will be noted, the months of highest mortality are July, August, September, October, November, December, and January, from whence it commences to decline up to and including June.

Studying the mortality from the viewpoint of diseases, it is noted that it is generally uniform and not caused by epidemics. Enteritis and tuberculosis are the most harmful. We must expect that with the suppression of alcohol and with the education of our people, in the schools, as well as by means of an energetic propaganda on the part of the department of health, we may be able to accomplish a decrease in the average per thousand of our deaths.

#### DIARRHEA AND ENTERITIS.

These diseases are due to the bad methods of feeding and nourishing children less than one year of age; to the poor quality of milk; to sleeping at irregular hours, and to other causes producing digestive disturbances.

The increase in the death rate occurs especially during the warm months of the year, during which the digestive organs of the children are weakened and the milk quickly deteriorates. The cause of a majority of intestinal diseases in children is due to bacterial infection, such infection being encouraged by the heat and the flies; by the lack of cleanliness and by contact. It is estimated that the children nursed by bottle have ten times less opportunity of living than those nursed at the mother's breast. By applying in a practical manner the principles taught by hygiene, all the children dying to-day from diarrhea and enteritis could be saved.

Besides the causes for infantile mortality above enumerated, there exist others of a general nature, ignorance and poverty, which will be the object of a close study, in a conscientious manner, that the remedy may be applied and thus save the lives of so many children. I can assure you beforehand that if mothers would nurse their children, infantile mortality would be reduced to its minimum.

#### DISEASES OF THE RESPIRATORY SYSTEM.

Deaths due to these diseases are caused by poor ventilation, carelessness in dressing, and also to complications from measles, whooping cough, and other diseases.

#### TRANSMISSIBLE DISEASES.

There is no exact idea of the fatal consequences to children of such diseases as measles, whooping cough, diphtheria, influenza, etc., apparently of slight importance and which, by protection through isolation and other means, would prevent their spread.

About one-half to one-fourth of all tuberculosis cases in children up to 5 years of age are related to the type belonging to cattle, and it is probable that all of these cases derive their infection from cow's milk infected with the Koch bacillus. Any of these infections can be prevented by protecting the milk from contamination and the remainder by avoiding direct contact with the sick.

#### CONGENITAL DEBILITY.

Many of the deaths from this group are caused by hereditary conditions which are impossible of control by the means afforded by public hygiene.

A few of them can be prevented by taking certain prenatal measures in regard to the mother. Some of these children would live if they were properly cared for after birth. Others die because of venereal diseases suffered by their parents.

The group due to other causes is not susceptible of analysis; however, a number of deaths from said causes could be prevented.

To summarize, it may be stated that at least one-half of the children who have died would be living to-day if the well-known hygiene and sanitary methods had been applied by individuals and communities.

## QUARANTINE HOSPITAL.

The following diseases have been treated in the Quarantine Hospital during this year: Typhoid fever 4, measles 16, varicella 45, diphtheria 7, leprosy 5, syphilis 18, tuberculosis 2, antirabies treatments 5, symptoms of leprosy 1, cervical adenitis 1, uncinariasis 1, symptoms of measles 1, gonococcus ophthalmia 1, pellagra 1, "Anafilaxis por alimentación" 1, buba 21. Those of leprosy were transferred to the leper colony.

## ANTITUBERCULOSIS SANATORIUM.

There have been admitted to this institution during the year 1917-18, 41 men, 35 women, and 3 children. Discharged as being cured: 3 women, 3 men. Improved: 15 men, 11 women, and 1 child. Deaths: 18 men, 16 women. Number of patients in the sanatorium: 5 men, 5 women, and 2 children.

## LEPER COLONY.

There are at present in the leper colony 39 adult patients and 1 child.

To close this report, we must state that the department of health purposes, if the Government assists us economically, to modify the existing conditions in Porto Rico from a sanitary standpoint by reducing mortality in general, and especially infantile mortality, by application of modern methods and by the education of the people—a very important factor that will contribute to the end in view.

Respectfully,

(Signed) JOSE A. DIAZ,  
Chief Division of Transmissible Diseases and Statistics.

*Anemia service, showing the total number of new cases attended at the station, by color, sex, age, clinical form, and result obtained during the fiscal year 1917-18.*

Anemia station.	Color.		Sex.		Age.				
	White.	Colored.	Male.	Female.	From 1 to 9 years.	From 10 to 19 years.	From 20 to 39 years.	From 40 to 59 years.	Over 60 years.
Adjuntas <sup>1</sup> .....	466	117	317	266	52	212	258	40	21
Agua Buenas <sup>1</sup> .....	215	42	158	99	9	119	71	35	23
Aibonito.....	1,036	47	569	514	165	401	309	182	26
Anasco <sup>2</sup> .....	622	52	313	361	86	264	194	92	38
Arecibo.....	901	59	684	276	84	341	347	154	34
Arroyo <sup>1</sup> .....	123	53	92	84	6	40	53	60	17
Barceloneta.....	440	184	313	311	94	250	186	72	21
Barranquitas <sup>2</sup> .....	238	84	162	160	45	103	187	17	20
Bayamon.....	1,289	649	1,013	925	259	668	606	349	67
Caguas.....	50	13	46	17	3	18	30	12	.....
Camuy <sup>1</sup> .....	119	2	88	38	8	37	38	31	7
Cayey.....	552	97	352	297	85	239	237	84	4
Fronton Chales <sup>2</sup> .....	147	16	73	90	33	82	40	8	.....
Cidra <sup>1</sup> .....	309	28	212	125	31	132	94	66	14
Comerio.....	177	72	155	94	21	79	99	35	15
Corozal.....	794	200	551	443	125	342	327	179	21
Guayama.....	422	166	287	291	208	276	55	36	8
Humacao <sup>1</sup> .....	153	25	104	74	19	56	53	40	10
Juncos <sup>1</sup> .....	61	14	70	5	6	14	27	21	8
Lares.....	973	119	619	473	56	364	421	219	38
Las Marias <sup>1</sup> .....	167	15	95	87	31	59	68	7	22
Maricao <sup>1</sup> .....	363	104	238	229	61	196	181	70	9
Mayaguez.....	848	81	478	451	112	360	243	181	38
Morovis.....	1,155	51	591	615	99	442	422	225	18
Patillas <sup>1</sup> .....	478	175	323	327	55	276	258	38	23
Ponce.....	268	16	149	185	25	70	108	75	6
Rio Grande <sup>1</sup> .....	51	12	40	23	7	18	17	17	4
Salinas <sup>1</sup> .....	59	23	39	43	16	21	22	13	.....
San German <sup>1</sup> .....	520	1	290	231	102	188	166	49	16
San Lorenzo <sup>1</sup> .....	118	22	99	51	8	40	55	36	11
San Sebastian <sup>1</sup> .....	930	175	636	469	133	274	316	278	104
Sierra Baja <sup>2</sup> .....	726	68	315	479	119	371	236	94	4
Utüado.....	679	85	454	260	49	198	301	147	19
Vega Baja.....	209	48	100	157	35	97	90	34	1
Villalba <sup>1</sup> .....	64	31	33	33	.....	37	17	9	1
Yabucoa.....	199	105	169	105	24	132	74	40	4
Yauco.....	1,178	554	913	819	189	700	555	253	35
Total.....	17,066	3,524	11,133	9,457	2,453	7,506	6,665	3,269	697







*Anemia service, showing the total number of new cases attended at the station, by color, sex, age, clinical form, and result obtained during the fiscal year 1917-18—Contd.*

Anemia station.	Clinical form.				Result obtained.				Total.
	Ben-ign.	Me-dium.	In-tense.	Very in-tense.	Cured.	Under treat-ment.	Left treat-ment.	Dead.	
Adjuntas <sup>1</sup>	39	68	383	93	171	289	123	-----	583
Agua Buenas <sup>1</sup>	37	156	47	17	80	137	40	-----	257
Albionito	116	499	385	83	74	823	186	11	1,083
Añasco <sup>1</sup>	199	191	227	57	175	353	146	-----	674
Arecibo	107	367	424	62	343	376	241	72	960
Arroyo <sup>1</sup>	5	15	57	99	27	135	14	-----	176
Barceloneta	43	99	250	232	11	245	368	4	624
Barranquitas <sup>1</sup>	199	111	35	7	135	87	100	4	322
Bayamon	91	1,112	691	44	651	1,081	206	10	1,938
Caguas	-----	12	29	22	8	45	10	3	63
Camuy <sup>1</sup>	5	52	52	12	2	115	4	1	121
Cayey	88	326	205	30	158	491	0	12	649
Fronton, Ciales <sup>1</sup>	8	148	7	-----	85	58	20	-----	163
Cidra <sup>1</sup>	70	121	102	44	71	196	70	10	337
Camero	70	132	45	2	14	181	54	4	249
Corozal	251	441	242	60	205	770	19	11	994
Guyama	250	256	68	4	25	333	220	-----	578
Humacao <sup>1</sup>	18	123	36	1	87	78	13	6	178
Juncos <sup>1</sup>	-----	24	51	-----	-----	75	-----	-----	75
Lares	628	411	43	12	346	746	-----	-----	1,092
Las Marias <sup>1</sup>	77	81	24	-----	30	88	64	5	182
Maricao <sup>1</sup>	181	260	22	4	169	224	74	-----	467
Mayaguez	356	388	177	8	153	493	283	43	929
Morovis	221	724	258	3	302	488	416	31	1,206
Patillas <sup>1</sup>	63	242	245	100	44	510	96	-----	650
Ponce	5	246	33	-----	57	171	56	2	284
Rio Grande <sup>1</sup>	7	19	30	7	10	31	22	-----	63
Salinas <sup>1</sup>	24	41	15	2	4	48	30	1	82
San German <sup>1</sup>	-----	10	295	216	161	327	33	16	521
San Lorenzo <sup>1</sup>	41	47	46	16	66	77	-----	-----	150
San Sebastian <sup>1</sup>	99	242	443	321	69	791	245	3	1,105
Serra Baja <sup>1</sup>	571	196	27	-----	650	102	42	-----	794
Utuado	43	487	175	9	29	685	-----	102	714
Vesga Baja	10	26	128	103	50	26	181	49	257
Villalba <sup>1</sup>	10	35	18	1	20	30	14	2	64
Yabucoa	65	117	77	15	67	135	72	1	274
Yauco	443	1,051	203	35	1,456	258	18	20	1,732
Total	4,398	8,876	5,595	1,721	6,005	11,098	3,487	423	20,570

<sup>1</sup> Station which only did work during the last semester of the fiscal year 1917-18 (January to June).

<sup>2</sup> Station which only did work during the first semester of the fiscal year 1917-18 (July to December).

NOTE.—The total number of uncinariasis patients as "new cases" in the 37 dispensaries which worked during the fiscal year 1917-18 was 20,590, and they can be classified in the following way:

	Number.	Percent- age.		Number.	Percent- age.
White	17,066	82.88	According to clinical form:		
Colored	3,524	17.12	Benign	4,398	21.36
Total	20,590	100.00	Medium	8,876	43.11
According to sex:			Intense	5,595	27.17
Male	11,133	54.06	Very intense	1,721	8.36
Female	9,457	45.94	Total	20,590	100.00
Total	20,590	100.00	According to the result:		
According to age:			Cured	6,005	29.17
Under 1 year			Under treatment	11,098	53.89
From 1 to 9 years	2,453	11.92	Left treatment	3,487	16.94
From 10 to 19 years	7,506	36.40	Total	20,590	100.00
From 20 to 39 years	6,665	32.38	Dead	423	-----
From 40 to 59 years	3,269	15.82			
Over 60 years	697	3.38			
Total	20,590	100.00			

NOTE.—The figures corresponding to uncinariasis mortality do not correspond to the anemia station records. They were taken from the mortality in the general statistics.

Municipalities.	I. General diseases.											II. Diseases of the nervous system.															
	Malaria.	Typhoid fever.	Measles.	Typhoid fever.	Diphtheria.	Grippe.	Dysentery.	Erysipelas.	Septicæmia.	Tuberculosis.	Tuberculosis general-ized.	Tuberculous meningitis.	Tuberculosis of other organs.	Rickets.	Syphilis.	Anæmia.	Tetramatic tetanus.	Other general diseases.	Encephalitis.	Meningitis.	Convulsions of infants (under 5 years).	Cerebral congestion.	Other diseases of the spinal cord.	Epilepsy.	Diseases of the ears.	Other diseases of the nervous system.	
Adjuntas.....	2		2											12		1											
Aguada.....																											
Aguadilla.....			2																								
Aguas Buenas.....														2													
Albionito.....			1																								
Atasco.....	5													7		4											
Arecibo.....		1												4		1											
Arroyo.....																											
Barceloneta.....	2		1											1		1											
Barranquitas.....																											
Barros.....														8													
Bayamon.....																											
Caba Rojo.....	4		5											1		1											
Caguas.....	1													4		1											
Camuy.....			2											1													
Carolina.....																											
Cayey.....	1													8													
Ceiba.....	1																										
Ciales.....														1		5											
Cidra.....																											
Coamo.....	1																										
Comerio.....			2													1											
Corozal.....																											
Fajardo.....																											
Fajardo.....	1													1													
Guaynabo.....														2													
Guayama.....	13													5													
Guayanilla.....	2		5																								
Guayama.....			4																								
Guayama.....																											
Hatillo.....																											
Hormigueros.....	4																										
Humacao.....	2		3											2													
Isabela.....	4		1																								



Municipalities.	III. Diseases of the circulation.			IV. Diseases of the respiratory system.						V. Diseases of the digestion system.							VI. Diseases of the genito-urinary organs.			XIII. External causes.				XIV. Ill-defined diseases.		Total general.
	Acute endocarditis.	Organic diseases of the heart.	Hæmorrhage (other diseases of circulatory system).	Acute bronchitis.	Broncho-pneumonia.	Pneumonia.	Pleurisy.	Pulmonary congestion.	Asthma.	Diseases of the mouth and anæmia.	Diarrhæa and enteritis (under 2 years).	Antylostomiasis.	Intestinal parasites.	Hernia, intestinal obstruction.	Other diseases of the intestines.	Other diseases of the liver.	Acute nephritis.	Diseases of the kidneys.	VIII. Diseases of kidneys—gangrene.	Other acute poisonings.	Burns (except coagulants).	Accidental submersions.	Other suicides.	Ill-defined organic diseases.	Cause of death not specified or ill-defined.	
Adjuntas.....				2					1		6	1	2					1								18
Aguada.....											13															24
Aguadilla.....											1															23
Aguares Buena.....											1															4
Albion to.....											2															17
Alaseo.....				2	1	1					1															31
Arecibo.....				2	1	1					2															39
Arroyo.....				2	1	1					2															1
Barceloneta.....				2	1	1					4															12
Barraquitas.....				1	1	1					5															11
Barros.....				1	1	1					9															23
Bayamon.....				4	1	1					2															45
Cabo Rojo.....				1	1	1					20															7
Caguas.....				1	1	1					5															28
Canmay.....				1	1	1					1															10
Carolina.....				2	10	3					12															54
Casidy.....				3							1															16
Cayey.....											2															10
Cidra.....				2	2	1					4															12
Cosmao.....				2	1	1					5															17
Corrao.....				1	1	1					10															5
Corrao.....				2	1	1					8															27
Corrao.....				1	1	1					2															1
Dorado.....				1	1	1					2															21
Fajardo.....				2	1	1					4															11
Guaynabo.....				3	1	1					14															20
Guayama.....											6															26
Guayanilla.....											4															10

	5	1	1	108	86	42	1	2	6	3	489	39	53	1	13	3	106	8	4	2	5	2	2	1	49	1,584
Guano.....																										
Hacienda.....				1	1	1					10	2				1	2									
Hormigueros.....				1	1	1					2	6				8										
Humacao.....				1	1	1					1	1														
Isabela.....				2	1	2					5	2														
Jayuya.....				4	3	1					9	2														
Juana Diaz.....				12	4	1					9	1														
Juncos.....				4	4	1					9	1														
Lajas.....											6	5														
Lave.....											6	5														
Las Marias.....											6	5														
Lolita.....											6	5														
Lorullo.....				2	2	2					4	4														
Las Piedras.....				2	1	1					4	4														
Manati.....				1	1	1					8	3														
Maricao.....				1	1	3					16	1														
Matunabo.....						3					3	1														
Mayaguez.....						3					1	1														
Moca.....				1	2	1					18	1														
Moravia.....				2	1	1					1	1														
Naguabo.....						3					18	1														
Narajallo.....				1	1	1					4	2														
Patillas.....				1	1	1					2	2														
Pedulas.....				15	9	2					41	4														
Ponce.....						1					1	4														
Quebradillas.....						2					2															
Rincon.....				2	1	2					10	7														
Rio Grande.....				1	4	4					7	4														
Rio Piedras.....						6					29															
Salinas Grande.....				4	4	3					1	1														
Salinas.....				4	4	4					4	1														
San German.....				4	4	3					16	1														
San Juan.....				1	1	2					13	5														
San Lorenzo.....				1	1	2					2	2														
San Sebastian.....											5	1														
Santa Isabel.....											2	2														
Tos Alta.....											1	1														
Tos Baja.....											1	2														
Trujillo Alto.....											11	5														
Utuado.....				1	1	1					7	7														
Vega Alta.....				2	2	1					6	5														
Vega Baja.....											6	5														
Villa Clara.....											7	3														
Villalba.....				3	1	1					13	3														
Yabucoa.....				4	4	2					10															
Yauco.....																										
Vieques (Isla de).....																										
Culebra (Isla de).....																										
Total.....	5	1	1	108	86	42	1	2	6	3	489	39	53	1	13	3	106	8	4	2	5	2	2	1	49	1,584

Municipalities	I. General diseases.														II. Diseases of the nervous system					III. Dis. of the circulatory system.							
	Malaria.	Typhoid fever.	Measles.	Whooping cough.	Diphtheria.	Dysentery.	Erysipelas.	Septicæmia.	Tuberculosis.	Tuberculosis, generalized.	Tuberculosis meningitis.	Abdominal tuberculosis.	Tuberculosis of other organs.	Rickets.	Syphilis.	Anæmia.	Cancer.	Tetanus, traumatic.	Other general diseases.	Meningitis.	Convulsion of infants (under 5 years).	Cerebral congestion.	Other diseases of the spinal cord.	Epilepsy.	Chorea.	Organic diseases of the heart.	
Adjuntas.....			1												10						1						
Aguada.....	2																										
Aguadilla.....			1																								
Aguas Buenas.....																											
Aibonito.....			7											3							1						
Añasco.....														4							1						
Arcebo.....											1			13													
Arroyo.....			3	1			1							9													
Barceloneta.....														2													
Barranquitas.....														2													
Barros.....														2													
Bayamon.....														2													
Cabo Rojo.....	5		2											2							1						
Caguas.....														2													
Camuy.....														2													
Carolina.....														2													
Cayey.....	1													2													
Cebalga.....	1		1											2													
Ciales.....														2													
Cidra.....														2													
Cosamo.....	2		4											2													
Comerio.....														2													
Corozal.....														2													
Dorado.....														2													
Fajardo.....														2													
Guaynabo.....														2													
Guamitas.....														2													
Guayama.....	1		5	1										2							2						
Guayanilla.....	14		4											2													
Guayacilla.....														2													
Guaynabo.....														2													
Habla.....														2													
Hormigueros.....														2													
Humacao.....	1		2											2													





Municipalities.	IV. Diseases of the respiratory system.					V. Diseases of the digestive system.						VIII. Diseases of the kidneys.	IX. Congenital malformations.	XIII. Burns (except conflagration).	XIV. Cause of death not specified or ill-defined.	Total general.
	Acute bronchitis.	Broncho-pneumonia.	Pneumonia.	Pleurisy.	Asthma.	Diseases of the mouth and annexa.	Diarrhea and enteritis (under 2 years).	Ankylositis.	Intestinal parasites.	Hernia, intestinal obstruction.	Other diseases of the intestines.	Diseases of the liver.				
Adjuntas.....	3	1	1				6		2							18
Aguadilla.....	1	1					3									21
Aguila.....		1					10		1		3				1	24
Aguas Buenas.....							2									5
Albionito.....	3	1					5									22
Ajaco.....	1						4									15
Arco.....	2	2	1				24		1				1		1	60
Arcebo.....	3						4									15
Barceloneta.....			1				6	1								15
Barranquitas.....	1	1					3				1				1	21
Barros.....	3		3				1									7
Bayamon.....	2						15		1						1	15
Cabo Rojo.....	4	2		1			6								1	37
Caguas.....	5						19								2	43
Camuy.....	2						6									24
Carolina.....	6						6		1							8
Cayey.....	2	6	1				19				1				2	38
Cebalga.....	1	1					5		2						1	13
Ciales.....	2		2		2		4	3	1							14
Coamo.....	1		1				7	1								16
Comerio.....							2	1								6
Coro'al.....							2									5
Dorado.....							13									2
Fajardo.....		1			1		11		1						1	24
Guaynabo.....				1			3								4	10
Guayama.....		6					11									19
Guayama.....	3						3									34
Guayanilla.....	1						4							1	2	13
Gurabo.....	2						7									9
Hatillo.....							8									8
Hormigueros.....	1	1					3		2						1	8
Humacao.....		2					8									22
Isabela.....	2						1			2	1					6
Jayuya.....																4

[illegible]

Municipalities.	I. General diseases.														II. Diseases of the nervous system.					III. Diseases of the circulatory system.					
	Malaria.	Typhoid fever.	Measles.	Whooping cough.	Diphtheria.	Grippe.	Cholera nostras.	Dysentery.	Erysipelas.	Sepilemia.	Tuberculosis.	Tuberculosis meningitis.	Rickets.	Syphilis.	Anemia.	Scurvy.	Tetanus, traumatic.	Other general diseases.	Encephalitis.		Meningitis.	Convulsions of infants (under 5 years).	Cerebral hemorrhage, apoplexy.	Epilepsy.	Hemorrhage (other diseases of the circulatory system).
Adjuntas.....	1			1																					
Aguada.....																									
Aguadilla.....																									
Aguas Buenas.....																									
Albionito.....			1											1	1								1		
Añasco.....	2												1	1											
Arecibo.....	3		2	1			2	1				1	1	1							13	4	1		
Arroyo.....	3																								
Barceloneta.....	5			1																					
Barranquitas.....																									
Barros.....																									
Bayamon.....																									
Cabo Rojo.....	2			2	1								1	1											
Caguas.....	1																								
Canuny.....			1																						
Carolina.....	1																								
Cayey.....					1																				
Cidra.....				1																					
Cidra.....																									
Coamo.....			1	3	1			2						1	1	3									1
Comerio.....																									
Corozal.....																									
Dorado.....	1																								
Fajardo.....								2																	
Guaynabo.....	2																								
Guánica.....			1					1																	
Guayama.....	10																								
Guayanilla.....	1		2	2																					

[illegible]

Municipalities.	IV. Diseases of respiratory system.					V. Diseases of the digestion system.								VI. Diseases of the genito-urinary organs.		VIII. Diseases of the skin.		IX.	XI. Diseases of early infancy.				XIII. External causes.		XIV. Ill-defined diseases.		Total.		
	Acute bronchitis.	Bronchopneumonia.	Pneumonia.	Pulmonary congestion.	Asthma.	Diseases of the mouth and annura.	Diarrhea and enteritis (under 2 years).	Ankylostomiasis.	Intestinal parasites.	Peritonitis.	Hernia, intestinal obstruction.	Other diseases of the intestines.	Diseases of the liver.	Acute nephritis.	Diseases of the kidneys.	Gangrene.	Erysipelas.		Congenital malformations (stillbirths not included).	Congenital debility.	Other diseases peculiar to early infancy.	Infantile tetanus.	Lack of care.	Burns (contusions excepted).	Other external violence.	Ill-defined organic diseases.		Causes of death not specified or ill-defined.	
Adjuntas.....	7	6	11				10							1					1	11	2		2		1		1	54	
Aguadilla.....	2						10							1					22	1							1	67	
Aguas Buenas.....	1	11	2				28					1							9	7	2						1	67	
Albion.....							7												1	1								18	
Alfaro.....	10	2					15							2					12	6	6							30	
Arecibo.....	15	1					46					1							18	4	11							61	
Bayamon.....	9	2	1				17							1					8	1	5							120	
Barranquitas.....	3						10												2	1	1							38	
Barceloneta.....	4	1					7												1	2	1							44	
Bayamon.....	3						35							1					10	1	1							23	
Cabo Rojo.....	8	2	1				1												1	19	1	4						24	
Caguas.....	14	2	2				27				1			3					6	16	1							88	
Camuy.....	8	1					8							1					1	16	2	1						76	
Carolina.....	4	2					7							1					3	11	1							18	
Cayey.....	1	12	3	1			14							1					10	10	1							28	
Cebalga.....	4	1					8												3	11	1							48	
Cidra.....	1	3					11												14	14	2							12	
Cidra.....	1	2					10							1					2	2	1							46	
Coamo.....	1	1					19												2	2	2							20	
Comerio.....	1	1					11												21	2	2							34	
Corozal.....							2							2					8	6	1							38	
Dorado.....	1	1					13												1	6	1							14	
Fajardo.....	2	2					7							1					12	6	1							32	
Guaynabo.....	4	1					19												12	6	1							23	
Guadalupe.....	2	3					20												11	2	9							64	
Guayama.....	2	1					1							2					9	12	2							38	
Guayanilla.....	7	1					13												1	9	13							6	
Gurabo.....	3						11						2						1	9	13							20	
Hatillo.....													3																28



Municipalities.	Esti- mated popula- tion, 1917.	Typhoid fever.	Smallpox.	Diphtheria.	Dengue.	Whooping cough.	Paratuberculosis.	Filaria.	Infantile tetanus.	Malaria.	Tuberculosis.	Leprosy.	Ankylostomiasis.	Colliballosis.	Malignant pimple.	Cutaneous syph- ilis.	Measles.	Trincoma.	Anthrax.	Pellagra.	A kind of leprosy.	Glanders (cough and cold).	Typhoid fever.	Scarlatina.	Diphtheria.	Epidemic dysen- tery.
Adjuntas	16,954*														102		22								1	1
Aguadilla	12,315		2						1	9	97		8	1			96	1		1			1		1	1
Aguada	24,027	3		4					11	2	7						12						1			1
Aguas Buenas	8,516			1						2	1						183									1
Afiasco	12,423	3								31	4						91						1			1
Afiasco	15,193								2	389	34	1	22				13						1			1
Arecibo	46,437	3	2	6		25				14	6	1	97				65						1			1
Arroyo	8,444			4						668	6			1			21						1			1
Barceloneta	13,308										3						37						1			1
Barraquitas	12,247	1	1	2		3					2		13	1			14						1			1
Barrington	15,156									8	92		7				16						1			1
Bayamón	32,837	7		5		7					5		3				37						1			1
Cabo Rojo	22,084	2							4	32	143		15	1			23						1			1
Caguas	32,464	17		9						2	6						66						1			1
Camuy	11,670	2		1					1	1	7						25						1			1
Carolina	17,767	1								2	11						17						1			1
Cayey	20,087	3	2							5	7		2				2						1			1
Cayey	5,725									1	1						2						1			1
Cidra	18,598	6				1				3	7		1				159						1			1
Cidra	12,803	3								8	21						11						1			1
Coamo	18,569	1		1						31	36	2	3				11						1			1
Comerio	13,290		9	1		1		1		5	1						2						1			1
Corozal	14,042									3	36						123						1			1
Dorado	5,669		1	2		1				1	1						2						1			1
Fejardo	14,215	5	1							3	36	2	1				2						1			1
Guaynabo	7,896									3	1						2						1			1
Guánica	10,773		3	3		35				244	36	2	6				363						7			1
Guayama	20,739	5			4				1	3	36						1						1			1
Guayanilla	10,946	10								4	4						17						1			1
Guayama	12,907									4	2						17						1			1
Gurabo	10,768	1	2							4	2						17						1			1
Hatillo	4,375									4	2						17						1			1
Hormigueros	19,344	8		8	2	9			2	15	10						496						3			1
Humacao	18,276	1	1	1						122	12	1					9						3			1
Isabela	10,279*	4								1	11						9						1			1
Jayuya	15,269	3								1	8						110						1			1
Juana Díaz	14,046	1	3	1						3	7						29						1			1
Ponce	14,046	1								3	7						145						1			1
San Juan	12,727									3	7						145						1			1
Lajas	22,830	1		5		1				3	7						145						1			1
Lares	10,046*	64								3	7						145						1			1
Las Marías																							1			1

[illegible]



Municipalities.	Esti- mated popu- lation 1917.	Meningitis, cerebral spinal, epidemic.	Whooping cough.	Filaria.	Infantile tetanus.	Malaria.	Tuberculosis.	Leprosy.	Ankylostomiasis.	Cutaneous syph- ilis.	Measles.	Erysipelas.	Anthrax.	Pellagra.	Glanders (cough and cold).	Births.	Deaths.	Marriages.	Grand total of deaths.	Deaths from 0 to 1 year.	Deaths from 1 to 2 years.	Deaths from 2 to 5 years.
Adjuntas.....	16,954*	15	19	..	..	..	..	..	..	..	..	..	..	..	..	728	75	206	503	91	69	67
Aguada.....	12,315	..	..	..	..	10	4	..	..	..	..	..	..	..	..	64	50	146	421	117	23	58
Aguadilla.....	24,027	9	..	..	..	17	10	..	..	..	..	..	..	..	..	784	76	388	567	134	37	72
Aguas Buenas.....	8,516	..	..	..	..	4	80	..	..	..	..	..	..	..	..	395	36	150	252	52	37	21
Albionito.....	12,423	4	..	..	..	2	19	..	..	..	..	..	..	..	..	428	41	138	281	40	40	40
Alfaro.....	15,199	11	4	..	..	2	46	..	..	..	..	..	..	..	..	479	56	264	458	96	37	62
Arcebo.....	40,437	42	3	..	..	19	81	..	..	..	..	..	..	..	..	1,798	212	544	1,375	305	166	145
Arroyo.....	8,444	2	3	..	..	5	16	..	..	..	..	..	..	..	..	238	17	66	233	62	20	23
Barceloneta.....	13,308	3	2	..	..	4	26	..	..	..	..	..	..	..	..	406	33	218	435	108	68	44
Barraquitas.....	12,247	..	..	..	..	..	..	..	..	..	..	..	..	..	..	451	8	104	171	39	19	15
Barros.....	15,150	..	5	..	..	17	6	..	..	..	..	..	..	..	..	1,040	97	612	766	157	101	88
Bayamón.....	32,857	17	8	..	..	10	19	..	..	..	..	..	..	..	..	881	69	358	624	153	84	66
Cabo Rojo.....	22,034	3	3	..	..	23	48	..	..	..	..	..	..	..	..	1,137	122	610	1,102	233	143	164
Caguas.....	11,670	5	..	..	..	1	9	..	..	..	..	..	..	..	..	410	69	190	284	55	34	35
Camuy.....	17,767	2	..	..	..	1	10	..	..	..	..	..	..	..	..	437	1	214	322	74	36	41
Carolina.....	20,087	6	..	..	..	2	21	..	..	..	..	..	..	..	..	656	95	360	755	127	99	132
Cayey.....	5,725	..	..	..	..	5	12	..	..	..	..	..	..	..	..	177	16	90	197	39	34	31
Cidra.....	18,598	4	2	..	..	1	19	..	..	..	..	..	..	..	..	400	43	270	531	114	57	75
Coamo.....	18,599	..	5	..	..	2	24	..	..	..	..	..	..	..	..	592	53	190	338	65	53	36
Comerio.....	13,290	1	..	..	..	7	20	..	..	..	..	..	..	..	..	657	52	194	376	96	40	83
Coroico.....	14,042	1	..	..	..	7	20	..	..	..	..	..	..	..	..	310	188	212	185	18	15	19
Coroico.....	5,669	..	..	..	..	3	9	..	..	..	..	..	..	..	..	460	10	88	130	36	12	13
Fajardo.....	14,215	5	1	..	..	2	2	..	..	..	..	..	..	..	..	460	17	214	469	98	83	57
Guaynabo.....	7,896	3	4	..	..	2	2	..	..	..	..	..	..	..	..	336	20	94	230	60	23	35
Guádalupé.....	20,773	1	1	..	..	18	11	..	..	..	..	..	..	..	..	502	34	184	330	65	31	57
Guayama.....	20,739	2	1	..	..	9	55	..	..	..	..	..	..	..	..	422	76	214	564	120	57	83
Guayanilla.....	10,946	..	6	..	..	17	34	..	..	..	..	..	..	..	..	396	38	260	319	63	44	55
Gurabo.....	12,907	..	6	..	..	4	7	..	..	..	..	..	..	..	..	553	33	132	302	69	33	47
Hatillo.....	10,753	..	6	..	..	3	20	..	..	..	..	..	..	..	..	460	10	88	130	36	12	13
Hormigueros.....	4,375	1	..	..	..	3	3	..	..	..	..	..	..	..	..	460	17	214	469	98	83	57
Humacao.....	19,344	8	2	..	..	1	9	..	..	..	..	..	..	..	..	173	14	380	118	22	13	10
Isabela.....	13,276	..	..	..	..	11	23	..	..	..	..	..	..	..	..	244	71	310	566	52	46	96
Jayuya.....	10,279*	9	..	..	..	9	4	..	..	..	..	..	..	..	..	661	13	310	566	52	46	96
Juan Diaz.....	13,299	0	..	..	..	8	35	..	..	..	..	..	..	..	..	649	74	106	286	41	23	27
Juncos.....	13,945	1	17	..	..	6	17	..	..	..	..	..	..	..	..	449	43	164	436	82	67	64
Lajas.....	22,727	3	..	..	..	1	12	..	..	..	..	..	..	..	..	456	58	188	253	53	38	43
Lares.....	23,660	3	..	..	..	1	9	..	..	..	..	..	..	..	..	1,116	79	442	794	165	88	125

Los Marías.....	10,046**	2	3	15	1	1	8	1	433	30	72	241	45	27	38
Lofos.....	13,888	2	24	9	1	1	8	1	570	41	200	390	90	53	35
Laguito.....	6,886	2	4	13	1	1	1	1	257	15	100	202	32	31	17
Las Pedras.....	10,070	5	1	1	6	30	30	399	399	55	208	300	39	39	87
Manatí.....	19,000	12	13	62	1	1	1	378	378	55	322	531	129	57	98
Manabo.....	7,138	6	9	1	63	17	17	307	307	20	84	387	46	54	23
Maunabo.....	7,746	7	24	104	63	1	1	312	312	15	128	249	268	142	163
Mayaguez.....	40,005	7	30	104	63	1	1	307	307	15	128	249	268	142	163
Moca.....	13,528	8	22	23	58	18	18	1,256	1,256	46	228	402	98	38	38
Morova.....	12,470	7	20	27	5	9	9	832	832	29	293	304	64	60	26
Naguabo.....	18,801	7	20	28	18	1	1	415	415	15	104	130	15	25	25
Negundo.....	12,835	22	103	13	6	32	32	372	372	51	172	201	46	52	52
Pailitas.....	15,803*	6	11	218	35	14	14	572	572	61	172	201	46	52	52
Petugas.....	11,801*	4	190	1	1	1	1	1,760	1,760	263	1,722	2,244	472	244	251
Petugas.....	69,236	36	1	1	2	1	1	349	349	24	128	272	64	42	42
Quebradillas.....	8,673	1	1	10	1	1	1	349	349	24	128	272	64	42	42
Rincón.....	12,711	25	1	25	1	1	1	459	459	24	178	392	70	68	19
Rio Grande.....	19,617	4	6	54	12	25	25	497	497	63	294	557	131	41	41
Rio Piedras.....	12,510	11	19	34	13	2	2	548	548	44	164	392	81	61	68
Sabana Grande.....	25,629	1	18	30	12	7	7	301	301	32	108	281	75	27	30
Salinas.....	21,613	1	60	30	30	1	5	919	919	69	352	681	153	100	86
San Germán.....	25,510	38	7	42	3	64	64	1,758	1,758	183	1,346	1,720	389	130	109
San Juan.....	60,532	9	8	350	11	1	1	1,586	1,586	41	318	390	72	40	54
San Lorenzo.....	14,886	1	4	4	3	21	21	793	793	98	238	550	118	38	74
San Sebastián.....	20,792	17	2	23	1	3	3	249	249	37	46	245	59	23	20
Santa Isabel.....	8,487	10	24	27	28	3	3	393	393	24	112	180	37	29	24
Tos Alta.....	10,007	11	8	25	5	21	21	266	266	24	115	115	24	19	17
Tos Baja.....	7,870	2	2	5	125	3	3	282	282	157	176	835	172	83	92
Trujillo Alto.....	6,825	1	29	46	9	57	57	1,240	1,240	8	148	219	35	32	36
Utueño.....	30,775	1	17	6	5	1	1	284	284	8	148	219	35	32	36
Vega Alta.....	9,606	1	6	44	71	1	12	422	422	40	168	466	133	61	47
Vega Baja.....	14,693	13	17	21	21	3	3	485	485	32	82	270	61	30	29
Villalba.....	19,834	8	14	2	52	2	2	924	924	33	328	596	125	73	88
Yabucoa.....	23,915	22	58	43	23	11	48	379	379	33	354	786	195	132	110
Yauco.....	13,681	7	10	15	2	6	6	329	329	33	182	380	132	60	35
Vieques (Isla de).....	1,755	1	1	1	2	2	2	30	30	20	9	9	6	1	.....
Culebra (Isla de).....	1,243,308	1,528	2,505	8	1,119	102	1,096	22	3	7	3	3,797	7,501	4,184	4,317
Total.....	1,243,308	1,528	2,505	8	1,119	102	1,096	22	3	7	3	3,797	7,501	4,184	4,317

## SUMMARY.

Total deaths.....	34,457				
Number of per cent in mortality.....	27.71	per cent.			
Total deaths by transmissible diseases.....	7,987				
Number of per cent due mortality by transmissible diseases.....	23.17	per cent.			
Total of births.....	34,457				
Balance between the number of births and mortality.....	27.71	per cent.			
Relation between the birth and infantile mortality for 0 to 5 years.....	2.70				

SYNOPSIS OF WORK DONE IN THE PATHOLOGICAL LABORATORY OF THE DEPARTMENT OF HEALTH IN COOPERATION WITH THE COMMISSION ON STUDY AND INVESTIGATION ANNEXED THERETO.

The pathological laboratory was inaugurated in January, 1918, but its equipment was purchased gradually. Hence much of the work mentioned in this report was done in the biologic laboratory.

This work is of two classes: The first comprises daily and current investigations of patients confined in the quarantine hospital or some measure related to the purposes pursued by said commission.

The second class of investigations is of superior order, since it is related with the different aspects of regional pathology.

EXAMINATIONS.

<b>Blood:</b>		<b>Urine: Microscopic chemical examination.....</b>	<b>33</b>
Malaria.....	10	<b>Exudates:</b>	
Widal's reaction.....	4	Pharyngeal for diphtheria.....	6
Count of erythrocytes.....	2	Mucosal for Hansen's bacillus.....	17
Count of leucocytes.....	2	Ulcerations.....	6
Differential count.....	4	Lueite reaction.....	1
Filariasis.....	5	Von Pirquet's reaction.....	2
Wassermann's reaction.....	34		
Feces.....	37	<b>Total.....</b>	<b>187</b>
<b>Sputum:</b>			
Bacteriological examinations for Koch's			
bacillus.....	16		
Cytologic examinations.....	8		

**Rabies.**—Five persons were bitten by a cat with rabies. The presence of Negri bodies was confirmed. The persons bitten received antihydrophobic treatment in the quarantine hospital. The brain of a heifer and a dog's brain were examined. These examinations were requested for purposes of diagnosis.

**Malaria.**—Numerous specimens of blood were examined, many of which came from the Barceloneta Hospital, having been sent for more careful examination, the San Juan Laboratory being better equipped.

**Diphtheria.**—In all cases the required bacteriological examination was made during the stay of patients in the quarantine hospital.

**Tuberculosis.**—The following methods of diagnosing were followed:

Bacteriological examination of sputum.

Cytologic examination of sputum.

Tuberculin reaction.

**Syphilis.**—All Wassermann's tests were made in the biological laboratory. Examination of exudates from lesions were made whenever required.

**Filariasis.**—The five investigations made were for the purpose of aiding clinics.

**Leprosy.**—The work was limited to study of five new cases and to due investigation in all suspicious cases presenting themselves.

**Pellagra.**—One case. The skin lesions were very characteristic, and on the other hand the intestinal form in this case included balnut. coli.

**Spirochaetosis.**—In February, 1918, a study of the urinary sediments of jaundice patients under the care of Dr. Frías, of this city, was commenced on request of said physician. In one of these cases the sediment revealed spirochaeta and the work of identification had to be continued because of the complexity of the matter. In a later note Dr. Giuliani rendered an opinion relative to icterio-hemorrhagic spirochaetosis as seen from a bacteriological new point notwithstanding the fact that at a previous scientific meeting held by the commission for the study of tropical and transmissible diseases the idea was expressed that it is impossible to affirm the relation of cause and effect without having first eliminated disturbing factors. Without an ultramicroscopic study of the spirochaeta it is not proper to affirm the specificity of said organisms before they are fully identified.

**Water.**—The bacterian count was in charge of Dr. Hernández. The isolation of Eberth's bacillus was the subject of study, different methods having been employed. Bearing in mind the urgency with which these reports were requested the brilliant-green method seems specially adaptable in practice.

**Milk.**—The bacteriological analysis of milk offers many difficulties. The methods for counting bacteria are very slow because of the different handlings for culture. In order to avoid considerable loss of time, the direct bacterian count has been thought of. It is true that extensive practice is required of the bacteriologist, but the technique is simple, and if the number of bacteria in a small given quantity is comparable to that obtained by coloration time is gained. Having a knowledge of the constant and unavoidable errors, the method is reduced, according to several investigators, to that

of selection. This work was commenced by a comparison of both methods. Dr. Hernández had charge of the Standard method and Dr. Giuliani made the direct examination. The number of samples examined was not sufficient to permit of definitive conclusions, but during the short time the work was carried on the utility of the technique of direct count seems to have been corroborated, and should be recommended as matter for study.

*Tropical frambesia.*—Since Drs. Font y Guillot and Hernández commenced their observations on this disease in Porto Rico, and presented clinic and laboratory evidence in a case isolated in the quarantine hospital, it may be said that frambesia constituted the principal theme of all scientific conversations in the department. Five suspicious cases were observed by Dr. Giuliani, and several examinations of ulcerations as well as several serological reactions inclined the diagnosis toward syphilis. However, the microscopic aspect and the clinical course of some cases uphold on belief that this disease figures in the nosologic table of Porto Rico with a frequency greater than could have been thought before the discovery of the first case.

Besides the works mentioned, the veterinarian, Dr. Varas, forwarded specimens of blood and pathological products of animals under his inspection. Anthrax, glanders, and parasitical diseases were added to those already mentioned.

All of these investigations, which require complete laboratory equipment, were carried out, as already stated, jointly with those of the biological laboratory, the small pathologic laboratory of the quarantine hospital having been reserved for clinical investigations.

#### BIOLOGICAL LABORATORY.

*List of towns which have sent samples to this laboratory for analyses to determine transmissible disease cases during the fiscal year 1917-18.*

Municipality.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
Adjuntas.....					2				1				3
Agua.....								3	2				5
Agüadilla.....	1	3		6	5	8	3		2	7	7	12	54
Agua Buenas.....				2					3		1	1	7
Albionito.....		2	2		1					1		1	7
Añasco.....				1	2			1					4
Arecibo.....		7	2	6	1		2	1	5	3	2	2	31
Arroyo.....		1							5	3	14	2	25
Barceloneta.....				37	1	20	72	8	10	42	1	37	228
Barros.....				1									1
Bayamon.....	8	5	4	11	10	8	5	18	5	15	13	8	110
Cabo Rojo.....			1	1									2
Caguas.....	1	4	1	8	4	7	8	11	29	12	4	8	97
Camuy.....		1			2			3	1				7
Carolina.....		1	4	7				1			13	3	29
Cayey.....		1			1				1	2		4	9
Cataño.....	1	3	3	5	7	2	5			2	3	5	36
Ceiba.....	3	3	2										8
Ciales.....					1	2	4	3	1		1		12
Cidra.....		1	2		1				1		1		6
Coamo.....	7	9	3	3	3	4						1	30
Comerio.....	4	6	1	3	1	2		3		7	3	3	33
Corozal.....				3		2	1	3	2	2		2	15
Dorado.....												3	3
Fajardo.....	6	5	2	7	13	3	3	4	7	9	11	1	71
Guánica.....	3	1	1	1									12
Guayama.....		3		1	2		4	43	27	36	47	19	186
Guayanilla.....	1						1				2	3	6
Gurabo.....				2	2				2			1	2
Hatillo.....				3	4	3			2	1		3	17
Humacao.....			1	3	4				2				17
Isabela.....			7		1			7		4	3	5	27
Jayuya.....			8										8
Juana Díaz.....	1	1			3	1	11			2	3		17
Junco.....				5			1	1	1		6	3	13
Lares.....											4	2	6
Las Marias.....												1	1
Loísa.....	1	2	1	3				2					13
Llano.....		1					3					1	1
Manatí.....	1	2	1	4				3	3	6	6	2	28
Maricao.....			2										2
Mayaguez.....	5	6	3	12	15	14	4	9	6	7	14	12	106
Moca.....				1									1
Morovis.....											3		3
Naguabo.....				2	1						1		4
Patillas.....								1					1
Pedroñal.....	1			1	2	5					3	1	13
Ponce.....	11	35	28	52	36	19	59	34		52	46	40	412
Rincón.....								1					1
Río Grande.....									8			1	9

*List of towns which have sent samples to this laboratory for analyses to determine transmissible disease cases during the fiscal year 1917-18—Continued.*

Municipality.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total.
Rio Piedras.....	1	3	.....	3	8	1	8	3	5	.....	3	1	36
Sábana Grande.....	.....	.....	.....	.....	.....	.....	2	5	15	17	19	18	76
Salinas.....	.....	.....	.....	6	1	4	1	30	37	14	19	8	130
San German.....	.....	4	.....	1	.....	.....	2	2	4	3	7	3	26
San Juan.....	143	223	159	270	147	121	249	228	221	277	231	185	2,454
San Lorenzo.....	.....	.....	1	1	.....	.....	3	3	.....	1	.....	1	7
San Sebastian.....	1	.....	.....	.....	.....	3	6	3	2	.....	.....	.....	15
Santa Isabel.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2
Tos Alta.....	.....	1	.....	1	.....	.....	1	.....	.....	.....	.....	1	4
Tos Baja.....	.....	.....	.....	2	.....	.....	.....	2	2	3	2	.....	11
Trujillo Alto.....	.....	.....	2	3	1	.....	.....	.....	.....	.....	1	.....	7
Utua.....	.....	.....	.....	17	5	7	5	14	1	3	3	.....	55
Vega Alta.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1
Vega Baja.....	1	5	11	5	10	1	1	1	.....	.....	.....	.....	35
Villalba.....	1	.....	4	.....	2	.....	.....	.....	.....	.....	.....	.....	7
Yabucoa.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Yauco.....	5	9	9	18	6	7	6	4	3	10	7	.....	84
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,672

Towns from which no samples were received: Barranquitas, Hormigueros, Lajas, Las Piedras, Maunabo, Naranjito, Quebradillas, Vieques, and Culebra.

Table showing the total number and kind of analyses made in this laboratory during the fiscal year ending June 30, 1918.

	July.			August.			Septem-ber.			October.			Novem-ber.			Decem-ber.			January.			Febru-ary.			March.			April.			May.			June.			Total.	To-tal.
	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.						
Human blood (microscopical exam-ination):																																						
Malaria.....	22	22		38	38		34	34	101	101		52	52		29	29	123	123	181	181		96	96		134	134		92	92		72	72		974				
Benign tertian.....	3	3	6	6	6	7	6	7	25	25	11	11	15	15	22	22	26	26	26	26		37	37		23	23		19	19		28	28		212				
Malignant tertian.....	2	2	6	6	6	6	6	6	22	22	8	8	5	5	22	22	24	24	24	24		3	3		12	12		9	9		3	3		117				
Quarlan.....																																						
Plasnia.....	1	1	1	1	1	1	1	1	2	3	5	19	19	1	1	1	1	1	1	1		3	3		6	6		1	2	3	2	2		44				
Hemoglobin reading.....																																						
Erythrocyte count.....																																						
Leucocyte count.....																																						
Differential count.....																																						
Serum diagnoses:																																						
Typhoid fever (Widal).....	9	13	22	4	16	20	3	31	34	9	38	47	11	18	29	15	13	28	13	19	32	9	29	38	19	29	48	19	41	60	12	33	45	138				
Typhoid fever (incomplete) agglutination.....	4	4	9	9	10	10	2	2	10	2	2	1	1	1	1	1	3	8	8	8		14	14		10	10		7	7	11	11	79	79					
Syphilis (Wassermann).....	7	10	17	11	10	21	8	18	20	19	39	13	9	22	19	12	31	17	15	23	12	21	33	18	39	17	15	32	19	16	35	4	14	18				
Syphilis (Hetch-Wimberg).....	1	1																																				
Blood cultures: Typhoid.....																																						
Blood of domestic animals:																																						
Cattle.....																																						
Black-leg.....																																						
Anthrax.....																																						
Trypanosoma brucei.....																																						
Serum reactions: Glanders.....																																						
Experimental inoculation: Rabies.....																																						
Brain tissues (rabies):																																						
Dogs.....																																						
Cats.....																																						
Cattle.....																																						
Human.....																																						
Urine: Chemical and microscopical examinations.....	31			41					36			49		22		13		29		31		43		38		38		30		25				397				
Transudates, exudates, and secre-tions:																																						
Sputums, tuberculosis.....	9	30	39	57	65	122	30	30	60	59	30	89	32	44	76	35	40	75	29	44	75	34	87	71	39	54	93	46	94	77	66	143	55	52	107			
Other bacteria.....																																						
Oral nasal pharyngeal exudate dipther.....	3	3		5	5		8	8	2	11	13	1	1	1	5	5	4	17	21	3	13	16	1	7	8	6	12	18	6	5	11	1	4	4				
Leprosy.....																																						
Vaginal exudate.....																																						
Urethral exudate, gonococcus.....	1	1	1	1	1	1	1	1	1	1	1	5	5	1	2	3	1	4	1	1	2	2	4	1	2	3	1	1	2	1	2	3	13					
Pus (staphylococcus).....																																						

Table showing the total number and kind of analyses made in this laboratory during the fiscal year ending June 30, 1918—Continued.

	July.			August.			Septem-ber.			October.			Novem-ber.			Decem-ber.			January.			Febru-ary.			March.			April.			May.			June.			Total.		To-tal.
	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.	T.	P.	N.				
Cyto diagnoses: Cerebrospinal fluid . . . . .																																					2	2	
Bacteriological examination:																																							
Water . . . . .			27			2			7			6			1			11			10			1			10			1			15			97	97		
Cow's milk . . . . .						17			42												22						22			34						130	130		
Clinical examination:																																							
Leptosy . . . . .																																							
Brub. . . . .																																							
Feces, intestinal parasites:																																							
Uncinaria . . . . .	14	21	35	16	18	34	5	7	12	8	17	25	2	17	19	5	5	7	30	37	9	21	30	4	23	27	2	31	33	1	10	11	2	18	20	70	218	288	
Bilharzia . . . . .																																							
Ascariides . . . . .				2			3			2																													
Tenia . . . . .				1			1																																
Anguilulias . . . . .				1		1																																	
Trichocephalus . . . . .	12	12	9	9	10	10	10	10	8	10	8	8	5	8	5	28	26	7	1	1	1	1	1	1	1	1	8	9	9	5	5	21	21	130	130				
Amebas . . . . .																																							
Cerebromonas . . . . .																																							
Uncinaria and bilharzia . . . . .																																							
Uncinaria and ascariides . . . . .																																							
Uncinaria and trichocephalus . . . . .	5	5	2	2	9	9	1	1	1	1	1	1	1	1	1	4	4	6	6	10	2	12																	
Uncinaria, bilharzia, and trichocephalus . . . . .																																							
Uncinaria, bilharzia, ascariides, and trichocephalus . . . . .																																							
Uncinaria, anguilulias, and trichocephalus . . . . .																																							
Bilharzia and trichocephalus . . . . .																																							
Ascariides and anguilulias . . . . .				1		1			1																														
Ascariides and trichocephalus . . . . .				3		3			2																														
Ascariides, anguilulias, and trichocephalus . . . . .																																							
Monilia sprue . . . . .																																							
Total . . . . .	74	100	205	131	156	355	96	123	274	173	226	497	94	165	287	112	110	236	170	250	460	159	304	510	129	243	425	160	300	530	181	240	495	154	198	398	1,031	2,417	4,672

## RECAPITULATION.

Positive.....	1,631
Negative.....	2,417
Not classified.....	684
Grand total.....	4,672
Samples returned.....	4,672

*Examination of rats during the fiscal year ending June 30, 1918.*

San Juan.	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Total.
	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	N.	T.	
Rats.....	436	436	506	506	467	467	538	538	436	436	476	476	459	459	421	421	509	509	450	450	506	506	417	417	5,621
Mice.....	96	96	64	64	105	105	104	104	140	140	158	158	190	190	178	178	187	187	182	182	165	165	168	168	1,737
Total.....	532	532	570	570	572	572	642	642	576	576	634	634	649	649	599	599	696	696	632	632	671	671	585	585	7,358

## TOTAL OF EXAMINATIONS.

Rats.....	5,621
Mice.....	1,737
Total.....	7,358



## ANNUAL REPORT OF THE DIRECTOR OF THE CHEMICAL LABORATORY, R. DEL VALLE SARRAGA.

Chemical, physical, and biological examinations have been made of 2,223 samples of materials of all varieties, the biological work referred to, was made in blood stains, with the precipitin tests; this work was performed in known stains of blood in the original research investigation that has been undertaken by the chief chemist to simplify the diagnosis of such stains in criminal cases.

During the present fiscal year we have continued the analytical work on medical prescriptions and crude drugs, besides the examination of all kinds of foods—special attention being paid to cow's milk—drinks, and liquors. Owing to the fact that prohibition is in force since March, the number of samples of alcoholic beverages examined for purity was small; nevertheless, a large number of samples of such liquors were examined for alcoholic strength, since March, for the office of the treasurer, 2.5 per cent being the maximum limit of alcohol for such beverages. And, as all importations must be examined regularly to find out whether the law is complied with, in regard to alcoholic strength, the number of samples is increasing constantly.

Out of 2,223 samples, 206 were of excellent quality, 557 good, 293 fair, 96 inferior, 75 suspicious, 355 adulterated, 271 bad (decomposed), 2 giving a positive result under special tests, 6 giving a negative result when examined in a similar manner, and 336 unclassified.

Of the total number of samples, San Juan sent the larger number (609). Other towns in the following order: Mayaguez, 143; Manati, 132; Aguadilla, 118; San German, 79; Humacao, 78; the remaining towns less than 75 samples.

Out of 1,049 samples of cow's milk, 206 were of excellent quality, 128 good, 293 fair, 62 inferior, 69 suspicious, 237 adulterated, and 56 unclassified. The larger number of samples were secured at San Juan, 332; other towns in the following order: Mayaguez, 97; Aguadilla, 77; San German, 70; Manati, 50; Arecibo, 48; Ponce, 44; Bayamon, 42; Guayama, 40; other towns secured less than 29 samples. It will not be out of place to mention the fact that the adulteration of milk was performed by the addition of from 5 to 25 per cent of water, but such dilution was greatly exaggerated in the town of San German, most of the adulterations running over 25 per cent, and a few, over 50 per cent of added water.

A large quantity of miscellaneous food products, amounting to 180,577 pounds, were found unfit for food purposes and ordered to be used otherwise. Nothing has been wasted. Rancid lard, butter and other edible fats were aerated, and purified by alkalies or made into soaps by home processes; thickened condensed milk has been used successfully in confectionery; sour milk was salted, and made into cheese; grains infected with worms were disinfected with carbon bisulphide, sifted and made into meal; and if the product could not be disposed of in a proper manner as a food, a denaturing agent was added and was used either for special industrial purposes or for feeding hogs.

A certain amount of work has been done in close cooperation with the United States food and drug laboratory. As soon as the Federal authorities were notified that burma beans containing illegal amount of prussic acid were imported in the island, we were required to make a general survey in the island. Four hundred and twenty-six samples were collected, and 198 were found of the poisonous varieties. All were destroyed.

An extensive amount of research has been developed in the investigation of ingredients for the preparation of "victory bread." An active work of propaganda has been extended to all towns of the island for the benefit of all bakers, by writing articles in the daily press and sending circulars with directions, as also samples of standard "victory bread." The results have been very gratifying.

Table No. 1 gives the work performed during the fiscal year, classifying the samples as to quality.

Table No. 2 states the source of samples.

Table No. 3 shows the source of samples of cow's milk and the classification of same.

Table No. 4 contains the violations recommended for prosecution to the various courts of the island.

Other tables sent herewith contains detailed statements of food and drug destroyed by the food and drug inspectors of the northern and southern districts.

TABLE NO. 1.—Work performed during the fiscal year 1917-18, classifying the samples as to quality.

	Excellent.	Good.	Fair.	Inferior.	Suspicious.	Adulterated.	Bad.	Positive.	Negative.	Unclassified.	Total.
<b>Milk and milk products:</b>											
Cow's milk	206	126	293	62	69	237				56	1,049
Evaporated milk		3		1						3	3
Condensed milk		2					1			2	3
Butter		2		1			1			2	5
Cheese		3					2				5
<b>Edible oils and fats:</b>											
Lard		3		2		1				2	6
Olive oil						7				1	8
Cocanut oil										1	1
<b>Cereals and their products:</b>											
Wheat flour		13		3			1			4	21
Bread		7	1	2			36			77	123
Dough							1				1
Crackers		3					2				5
Oatmeal		3				9					12
Corn meal		3		2							5
Corn		1					3	1		1	5
Rice		5		6			3				14
Macaroni							1				1
Corn bread		1									1
Cornstarch		5									5
Soup paste										1	1
<b>Leguminous seeds and their products:</b>											
Beans		185	1	7	1		198			34	426
Spanish peas				1						1	2
Peas				2						1	3
<b>Other preserved meats:</b>											
Ham		2									2
Mortadella		2					1				3
Salmon		1					1				2
Bacon		2									2
Cod		1					7			2	10
Sausage		1					2				3
Machuelos		1									1
Herrings		1									1
Pork ribs										1	1
<b>Waters:</b>											
All kinds included		10			3					24	37
<b>Reagents:</b>											
Reagents										60	60
<b>Drugs:</b>											
Orange-flower water		57				23					80
Vermifuge										1	1
Crude drugs and salts		56		6		38				40	140
<b>Miscellaneous products:</b>											
Essential oils		2								1	3
Medical prescriptions		18				2				3	23
Artificial tobacco						1					1
Viscera (medico-legal investigation)									6		6
Perfumes		2								2	4
Eggs										1	1
Coloring matter		2								3	5
Coffee		2								1	3
Bonbons		2								2	4
Red pepper		2		1							3
Common salt						1				4	5
Tubers										3	3
Bean meals		1									1
<b>Saccharine products:</b>											
Sugar		3								1	4
Molasses		1								1	2
<b>Preserved fruits:</b>											
Figs		1									1
Raisins							1				1
Cherries		1									1
<b>Refreshing beverages:</b>											
Soda water		1								1	2
Nonalcoholic beverages		4								13	17
Carbonated drinks		7				22				2	31
Iron brew		1									1
Ricollins		1									1
Espumosa liquida										1	1

TABLE NO. 1.—*Work performed during the fiscal year 1917-1918, classifying the samples as to quality—Continued.*

	Excellent.	Good.	Fair.	Inferior.	Suspicious.	Adulterated.	Bad.	Positive.	Negative.	Unclassified.	Total.
Alcohol and alcoholic preparations:											
Wood alcohol.....		1								7	8
Wine.....					4					1	5
All other liquors.....		1								7	8
Denaturing agents:											
Gasoline.....		1									1
Kerosene.....		1								1	2
Vinegars:											
All kinds included.....		1			9					1	11
Canned meats and vegetables:											
Sardines.....		1					4				5
Spanish red pepper.....		1									1
Oysters.....										1	1
Fish.....							1				1
Salmon.....							3				3
Total.....	206	391	295	89	73	239	258	1	6	220	1,819

TABLE NO. 2.—*Source of food and drugs and number of samples examined.*

Adjuntas.....	21	Las Piedras.....	5
Aguada.....	3	Manati.....	132
Aguadilla.....	118	Maracao.....	3
Agua Buenas.....	1	Maunabo.....	2
Albionito.....	4	Mayaguez.....	143
A lasco.....	5	Moca.....	1
Arecibo.....	75	Morovis.....	3
Arroyo.....	3	Naguabo.....	7
Barceloneta.....	11	Naranjito.....	0
Barranquitas.....	0	Patillas.....	8
Barros.....	7	Peñuelas.....	4
Bayamon.....	72	Ponce.....	60
Cabo Rojo.....	17	Quebradillas.....	5
Caguas.....	50	Rincon.....	1
Camuy.....	16	Rio Grande.....	14
Carolina.....	19	Rio Piedras.....	57
Cayey.....	22	Sabana Grande.....	14
Celba.....	9	Salinas.....	2
Ciales.....	11	San German.....	79
Cidra.....	4	San Juan.....	609
Coamo.....	5	San Lorenzo.....	2
Comerio.....	7	San Sebastian.....	5
Corozal.....	10	Santa Isabel.....	2
Celubra.....	1	Tos Alta.....	21
Dorado.....	3	Tos Baja.....	6
Fajardo.....	22	Trujillo Alto.....	4
Guaynabo.....	6	Utua.....	18
Guánica.....	2	Vega Alta.....	9
Guayama.....	52	Vega Baja.....	25
Guayanilla.....	0	Vieques.....	19
Gurabo.....	12	Villalba.....	0
Hatillo.....	15	Yabucoa.....	6
Hormigueros.....	0	Yauco.....	29
Humacao.....	78	Treasurer of Porto Rico.....	73
Isabela.....	0	Chemical laboratory, department of health.....	73
Jayua.....	1	Bureau of supplies, printing, and transportation.....	6
Juana Diaz.....	5	United States food and drug laboratory.....	6
Juncos.....	32	District court, San Juan.....	5
Lajas.....	2	Insane asylum.....	6
Lares.....	10	Department of health.....	4
Las Marias.....	2		
Lolita.....	11		
Luquillo.....	0	Total.....	2,223

TABLE NO. 3.—Source and classification of samples of cow's milk, 1917-18.

[E—excellent, G—good, R—fair, I—inferior, S—suspicious, of adulteration, A—adulterated, U C—unclassified, Per cent—per cent of adulteration.]

Towns.	E.	G.	R.	I.	S.	A.	U. C.	Total.	Per cent.
Adjuntas.....	2					7		9	77.7
Aguadilla.....	20	12	28	11	2	4		77	5.2
Albionito.....						1		1	100.0
Añasco.....						2		2	100.0
Arecibo.....	10	11	18	1		5	3	48	10.4
Arroyo.....	1							1	
Barceloneta.....							1	1	
Barros.....								1	100.0
Bayamon.....	10	2	10	1	2	11	6	42	26.2
Cabo Rojo.....	4	1	3		1	8		17	47.1
Caguas.....	1	2	8	1	2	9	2	25	36.0
Camuy.....			1					1	
Carolina.....	1	1	4			3		9	33.3
Cayey.....	1		4		1	4	1	11	36.4
Coamo.....							1	1	
Corozal.....	1							1	
Dorado.....	1							1	
Fajardo.....	1		1		1	2		5	40.0
Guánica.....						1		1	100.0
Guayama.....	5	2	18	6	1	8		40	20.0
Gurabo.....		1	3			1		5	20.0
Hatillo.....			2					2	
Humacao.....	5	2	10	5	1	2		25	8.0
Juana Díaz.....					2	2	1	5	40.0
Juncos.....	1	1	2	1		4		9	44.4
Lajas.....			1					1	
Lares.....	1				1	1		2	50.0
Loísa.....		2			1	2		6	33.3
Manatí.....	24	10	15	2	6	1	1	59	1.7
Maricao.....						1	1	2	50.0
Mayaguez.....	8	6	24	6	13	32	8	97	32.9
Morovis.....							1	1	
Patillas.....					1			1	
Peñuelas.....						1		1	100.0
Ponce.....	5	4	5	6	1	19	4	44	43.1
Quebradillas.....	1							1	
Río Grande.....	1		3			2		6	33.3
Río Piedras.....	5	4	13	1	1	5		29	17.2
Sabana Grande.....			1	1		4		6	66.6
San German.....	14	11	11		6	26	2	70	37.1
San Juan.....	73	51	97	18	26	44	23	332	13.2
San Lorenzo.....						2		2	100.0
San Sebastian.....	1	1	2			1		5	20.0
Toa Alta.....	2	1	5	2		4		14	28.5
Toa Baja.....	1							1	
Trujillo Alto.....	2						1	3	
Utusado.....						3		3	100.0
Vega Alta.....		1				6		7	85.7
Vega Baja.....	3		4		1	4		12	33.3
Yauco.....						4		4	100.0
Total.....	206	126	293	62	69	237	76	1,049	22.5

TABLE NO. 4.—Classification of cases recommended for prosecution.

Number of cases of adulterated milk.....	157
Number of cases convicted and condemned.....	40
Number of cases acquitted.....	4
Number of cases pending of report from courts.....	113
Total.....	157

## REPORT OF THE GOVERNOR OF PORTO RICO.

DISTRICT COURT OF SAN JUAN.		No. of cases.		Penalty imposed.	
No. of cases.	Penalty imposed.			DISTRICT COURT OF ARECIBO.	
44.....	pending of report.	6.....	pending of report.	DISTRICT COURT OF AGUADILLA.	
DISTRICT COURT OF PONCE.					
1.....	1 day in jail.	1.....	1 month in jail.		
2.....	2 days in jail each.	2.....	pending of report.		
2.....	3 days in jail each.	3.....		DISTRICT COURT OF GUAYAMA.	
2.....	5 days in jail each.				
2.....	acquitted.				
17.....	pending of report.			DISTRICT COURT OF HUMACAO.	
26.....					
DISTRICT COURT OF MAYAGUEZ.					
1.....	1 day in jail.				
2.....	2 days in jail each.				
23.....	5 days in jail each.				
5.....	10 days in jail each.				
1.....	15 days in jail.				
2.....	acquitted.				
28.....	pending of report.				
62.....					

## DIVISION OF SANITARY ENGINEERING.

Like all the divisions comprising the activities of the department of health, that of sanitary engineering has for its object the prevention of diseases and as a natural sequence the preservation of health. Necessarily a large part of its activities are comprehensive, the fundamentals being the study and approval of plans for urbanization, aqueducts, cisterns, sewers, buildings, plumbing, etc., as well as the periodical inspection of work in course of construction, and its final approval when completed.

Although the personnel is highly efficient it is not all that might be desired, but nevertheless delays in the work of the division are negligible.

For example, from January 1, 1917, to May 31, 1917, 377 permits were issued for constructions, alterations, repairs, etc., while in the current year, for the same period, 621 permits were issued for the same purpose, without taking into account the plans which were returned or disapproved. This increase is in inverse ratio to a gradual decrease in the number of constructions, as may be seen from the accompanying diagram for the years 1914-1917 and is undoubtedly due to the abnormal circumstances which affect the country as a consequence of the war.

Diagram showing variation in total number of plans approved by the division of sanitary engineering from June 30, 1913, to June 30, 1918.

[Includes new buildings, repairs and alteration, and plumbing plans.]

Year ending June 30—	New build-ings.	Repairs and altera-tion.	Plumb-ing plans.	Total plans.	200	400	600	800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400	3600
1913.....	1,470	333	1,162	2,965																		
1914.....	837	531	2,040	3,408																		
1915.....	722	443	1,571	2,736																		
1916.....	723	479	1,770	2,972																		
1917.....	483	423	1,661	2,567																		
1918.....	712	637	1,185	2,534																		

## MEDICAL TOPOGRAPHY.

The preparation of a medical topography chart of the island is of vital importance, and is an arduous work which can not be accomplished by simply wishing, for it takes a great deal of time and must be performed in a gradual manner. Meantime, medical topographies should be made of certain sections especially stricken by specific morbigenous agents, malaria among others, intensely developed in the so-called irrigation zone extending from Patillas to Juana Diaz. The division has already prepared that of the jurisdiction of Barceloneta, which is included in its proper place elsewhere in this report; that of the district of Guayama is also being prepared.

*Watershed surveys.*—The surveys of the watersheds from which the water supplies of all the municipalities of the island are or may be obtained, which were begun three years ago, can and should be completed, with a view to determining their sanitary condition. In the reports of these surveys the deficiencies of the existing watersheds are described and the manner in which the deficiencies may be remedied, indicated. The commissioner of health, therefore, will recommend to the municipal authorities the feasibility of obtaining a good water supply, free from contamination, as well as the best way of improving their present water supplies.

*Sewerage systems.*—A general survey of all the municipalities should be undertaken with a view to suggesting improvements and the best way of correcting deficiencies. There are many towns which have waterworks, but which can not at present afford to build a complete sewerage system. Private sewers, however, may be built, and the towns greatly benefited therefrom.

*Housing, buildings, etc.*—The improvement of the housing conditions on the island continues to occupy a large part of the attention and energies of the engineers of this division. An educational campaign is necessary to overcome the determined resistance of people accustomed to overcrowding and to dark, poorly ventilated rooms. A great deal of the time has been spent in trying to convince proprietors of the necessity of constructing their houses on wide, properly urbanized streets, and on leaving unoccupied a certain percentage of each lot. They refuse to see the point, especially when it affects their pecuniary interests; and when the good to be derived therefrom is not immediate, they consider it problematical at best, if not impossible. The department of education can cooperate with the department of health toward this end by means of periodical lectures on public hygiene and sanitation, delivered to the school children, thus taking a great step forward to insure a public opinion favorable to this department's activities. The strongest opposition to the enforcement of sanitary regulations which is encountered by this division comes from those ignoring the most elementary principles of hygiene, while the best backing and support which could be forthcoming in the enforcement of regulations would be from an enlightened public opinion.

The effect of housing conditions on tuberculosis is well known. Mr. F. W. Dalrymple, sanitary engineer for the insular board of health of Porto Rico, in 1914 quoted the following statement from the head of the department of public health in Australia: "Tuberculosis is essentially a house disease, due to and encouraged by structural defects, by the want of ventilation, by the shutting out of the sunlight, by dampness in and around the house, and by overcrowding in the rooms, specially bedrooms. In offices, both public and private, in factories, in workshops, in schools, wherever there is less fresh air admitted than the workers require, we find we are dealing with the breeding places of consumption, especially is this so after epidemics of measles and whooping cough." In the death rate and morbidity due to transmissible diseases in the island, tuberculosis heads the list. It is impossible to over emphasize the importance which the improvement of the house conditions of both rich and poor, especially the latter, has.

Although there are no regulations governing the construction of, repairs to, alteration of, and additions to theaters, schools, factories, except cigar factories, assembly and dancing halls, and other buildings where crowds gather, it should be stated that the insular board of health has under consideration drafts of regulations covering the subject and will use in this connection the data collected by the division of sanitary engineering.

*Amendments to regulations.*—It has been found that it is necessary to revise the regulations concerning the heights of buildings and the percentage of the building lot which should be left unoccupied, and amendments to sanitary regulations No. 14 (sec. 25) and No. 6 (sec. 4) have been submitted to the insular board of health through the commissioner with this end in view. Undoubtedly the board will approve these amendments or similar ones as they are necessary at present and will be more so in the future.

*Puerta de Tierra.*—Steps are being taken toward improving the housing conditions in Puerta de Tierra. In the place known as "Escambron," to the north of the Military Road, a part of the United States Military Reservation has been set aside provisionally for the transfer thereto of the houses of the poor at present located on insular government grounds in the wards of "Hoyo Frio" and "Salsipuedes," to the south of Puerta de Tierra. The total area thus set aside at the "Escambron" is approximately equal to 21 acres; 60,150 square meters will be divided into 401 lots of 150 square meters each and the remainder of the acreage will be taken up by the streets and plaza. There will be five streets running north and south and eight streets running east and west with one plaza in the center. The blocks will be 30 meters wide and from 60 to 100 meters long.

The use of this property of the United States Government will be limited to the time required to properly urbanize "Salsipuedes" and "Hoyo Frio." This concession, though it may be of a temporary or provisional nature, is due to the constant endeavors of the Hon. Arthur Yager, governor. Both of these wards are mainly in the low swamp lands to the south of Puerta de Tierra. At present there are no streets in them. The houses or shanties there have been built helter skelter in utter disregard of sanitary regulations and principles; they do not follow any alignment, and the clearance between them in many cases is only about 12 inches and in most cases not over a meter. They are mostly built of boards and slats from crates and boxes from the storehouses in San Juan or wherever obtainable. Most of them have no latrine and the excreta is dumped into the sea or else into the ditches which drain the higher portions of Puerta de Tierra. These ditches are full of rubbish, papers, excreta, etc., and are breeding places for flies. In most cases the distance from them to adjacent houses varies from about 1 to 6 feet. The ditches to a certain extent have been left open by the people purposely as follows: The land on which their houses are built is reclaimed by first fencing in a small portion of the swamp with slats, planks, pieces of corrugated iron, etc., and then filling in the space thus isolated with dirt, straw, rubbish, etc. Narrow ditches, in most cases not over 2 feet wide, are left open at irregular intervals for the purpose of draining the higher levels. Up to a short time ago the soil pipes of stores, factories, houses, etc., built on the higher portions of Puerta de Tierra, used to empty into these ditches. These ditches could not well be widened without removing houses; but they could be cleared of papers, rags, and rubbish. The owners of the factories, stores, houses, etc., of the buildings in the higher portions of Puerta de Tierra have been required to either extend their soil pipes or construct septic tanks. Those notified to correct deficiencies were advised of the proposed bulkhead along the established line and of the probable undertaking by the Federal Government of the dredging of a large part of the harbor of San Juan and the filling in of the low lands of Puerta de Tierra to about 6 feet mean low-water level, so that they might bear these improvements in mind when deciding on the best way of correcting the deficiencies.

"Salsipuedes" and "Hoyo Frio" were not the only wards requiring cleaning up and proper urbanization. The wards of "Miranda" and "Riera" are quite as bad. The owners thereof have been required to urbanize properly their properties in accordance with sanitary regulations No. 6. José P. Miranda has presented plans and they have been approved. At our suggestion Mr. Miranda has urbanized in accordance with the street survey originally proposed by Mr. Dr. Lino and approved by the San Juan Harbor board in 1913. José D. Riera presented plans, but they were rejected as being incomplete. It is expected that he will submit complete plans within a short period.

Puerta de Tierra has long been the most serious menace to the health of the inhabitants of San Juan. Let us hope that with the filling in of the low swampy land with the material dredged from the harbor and the new urbanization in conformity with sanitary regulations and the plans approved by the San Juan Harbor board in 1913 the morbidity in Puerta de Tierra will be greatly reduced, especially that caused by tuberculosis, and that once the unsanitary conditions in this ward are removed the great menace to the city of San Juan will disappear. It is well to recognize the effective and decided cooperation rendered to the department of health by the department of the interior in overcoming the main difficulties and making feasible all the projects.

*Waterworks.*—Mayaguez, the third city in the island in importance and population, lacks a good waterworks system. In previous reports from this division this lamentable fact has been mentioned. It is impossible to refrain from referring to it once more and to insist that the necessary steps be taken to provide this city with an adequate water supply, free from contamination, and in sufficient quantity to meet the needs of its inhabitants. The present waterworks system was installed in 1861, and is thus the oldest in the island. It has undergone repairs and alterations since then, but



these have been more in the nature of maintenance than of improvements. The following important deficiencies remain uncorrected:

First. Capacity and pressure are insufficient to meet the demands of the inhabitants for their daily needs, or, as a matter of course, to afford protection against fire.

Second. The distribution system is very poor and an entirely new system is absolutely necessary.

Third. There are no settling basins and no filters.

Fourth. The reservoirs and watershed are not protected against contamination. Latrines, corrals, coffee plantations, houses, and other means of contamination are found in the watershed. Bacteriological analyses have shown excessive bacterial richness. Thus, in the last analysis, on June 28, three samples were examined, as follows:

Samples taken from—	Number of bacteries per c. c.	Bacillus coli.
Dam.....	2,553	Positive.
A faucet.....	2,433	Do.
Reservoir.....	2,040	Negative.

Fifth. Water meters are not in use. This is important, because water being scarce it should not be wasted.

*Fajardo.*—Last April samples from the reservoirs and faucets from the Fajardo waterworks were examined and the presence of the bacillus coli was revealed in all. This, taken in connection with a gradual increase in the percentages of deaths attributed to intestinal troubles, rising from 21.3 per cent of the total number of deaths during January to 64.5 per cent of the total number of deaths during March, led us to make the following recommendations after a thorough investigation and inspection was made by one of the engineers of this division.

First. Intake dam should be changed to a point higher up the river.

Second. An apparatus for applying calcium hypochlorite, or else liquid chlorine, should be installed.

Third. Filters should be installed.

Fourth. One of the reservoirs which was found to be leaking should be repaired.

Fifth. Bathing and watering of cattle and horses should not be allowed above dam site.

Sixth. Crossing of Fajardo River above the dam site should be prohibited unless the crossing be over a bridge. This is especially important during the sugar crops.

Seventh. Washing of clothes in the river and its tributaries should be prohibited above the dam site.

Eighth. Sanitary latrines should be built for all houses in watershed.

Ninth. No constructions should be allowed within 50 meters of the Fajardo River.

Tenth. Meters should be installed.

We likewise advised that the water be boiled before using for drinking.

The mayor at once offered his cooperation and steps were taken to follow recommendations 4, 5, 7, 8, 9, and 10, and on May 11 an analysis of water samples from the reservoir sent to the Biological Laboratory did not reveal the presence of bacillus coli.

*San Juan.*—The establishment of the cantonment in Seboruco district in the neighborhood of San Juan has benefited this city in more than one way from a sanitary point of view. Camp "Las Casas" will be a town by itself, with macadamized streets, sewers, water supply, etc. The actual capacity of the San Juan pumps and filters is not sufficient to supply the needs of both the cantonment and the city; hence the plant has had to be duplicated.

There will be in operation at the filtration plant in July, 12 Roberts' filters of 500,000 gallons per 24 hours each, instead of the 6 filters which have been used heretofore. In addition 2 centrifugal pumps of 2,200 gallons per minute, with their respective motors of 150 horsepower each, will be installed at the plant. At the "Loma de Prim" reservoir 2 "booster pumps" with their motors of 150 horsepower each have been installed to pump water from the reservoir to two 204,000 gallons steel tanks recently installed there. The water level of these tanks will be at an elevation of 76.5 meters above sea level. At the Plaza del Mercado in San Juan another steel tank is being installed. This tank will have an elevation of 63.9 meters above sea level; its capacity will be 600,000 gallons. In case of any interruption in the city water supply this tank will be able to supply water to the city for a number of hours. It has been calculated that a stream of water about 20 feet higher than the tallest building in the city will be supplied from the tank.

The following towns have waterworks but no sewers: Aguas Buenas, Aibonito, Arroyo, Barranquitas, Ciales, Coamo, Comerio, Corozal, Guanica, Guayama, Guayanilla, Gurabo, Humacao, Isabela, Juana Diaz, Jayuya, Juncos, Maricao, Maunabo, Mayaguez, Naranjito, Patillas, Peñuelas, Ponce, Quebradillas, Rio Piedras, Salinas, Utuado, Vieques, and Yabucoa.

There are 39 towns which have neither waterworks nor sewers, and 8 which have both.

With the present high cost of materials, and the high cost of labor which the call to service under the selective service act will bring about, there is hardly any hope in the near future for sanitary improvements of the magnitude of sewerage systems and waterworks in the towns and cities in need of same.

The table which follows will give an idea of some of the conditions in the waterworks of the island. The nine columns are in reply to the following questions:

I. Is the supply sufficient during long droughts?

II. Has the supply been interrupted on account of breaks or accidents in the main supply line?

III. For how long?

IV. Has the municipality sufficient piping of the proper sizes for repairing breaks?

V. Has the municipality the tools and lead necessary for repairs?

VI. Has the municipality in its employ skilled workmen for undertaking the repairs?

VII. How many house connections are there?

VIII. How many are metered?

IX. Remarks.

Towns.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.
Aguadilla.....	Yes.	No..	.....	Yes.	Yes.	Yes.	458	418	One of the best of the island.
Aguas Buenas..	No..	No..	.....	No..	No..	No..	86	None.	Private property.
Aibonito.....	Yes.	Yes.	1 day.....	Yes.	Yes.	Yes.	170	None.	An additional reservoir built recently.
Arecibo.....	No..	Yes.	.....	No..	No..	Yes.	649	570	Electrically moved; no suspension in supply since electric motor was installed.
Arroyo.....	No..	Yes.	5 days.....	Yes.	Yes.	Yes.	144	18	
Barranquitas...	Yes.	No..	.....	No..	No..	No..	62	None.	Private property.
Caguas.....	Yes.	No..	.....	Yes.	Yes.	Yes.	1,264	39	
Cayey.....	No..	No..	.....	No..	No..	Yes.	658	26	
Ciales.....	No..	No..	.....	Yes.	No..	Yes.	150	None.	
Coamo.....	Yes.	Yes.	8 days.....	Yes.	Yes.	Yes.	180	None.	
Comerio.....	Yes.	No..	.....	Yes.	Yes.	Yes.	60	None.	
Corozal.....	Yes.	No..	.....	No..	Yes.	No..	70	1	
Ensenada.....	Yes.	No..	.....	Yes.	Yes.	Yes.	125	None.	
Fajardo.....	Yes.	Yes.	24 hours.....	Yes.	Yes.	Yes.	549	4	
Guanica.....	No..	Yes.	25 hours.....	No..	No..	No..	50	None.	
Guayama.....	Yes.	Yes.	12 hours.....	Yes.	Yes.	Yes.	608	23	Interruption in supply always due to defective pump.
Guayanilla.....	Yes.	Yes.	6 hours.....	No..	No..	No..	84	None.	
Gurabo.....	Yes.	No..	.....	Yes.	Yes.	Yes.	208	1	
Humacao.....	Yes.	Yes.	12 hours.....	No..	Yes.	Yes.	498	374	
Isabela.....	Yes.	Yes.	1 and 2 month.	No..	Yes.	No..	18	None.	
Jayuya.....	Yes.	No..	.....	No..	No..	Yes.	40	None.	Water drawn from Guayabal always turbid.
Juana Diaz.....	No..	Yes.	2 or 3 days.....	No..	No..	No..	150	None.	
Juncos.....	No..	Yes.	4 to 14 days.....	Yes.	No..	Yes.	314	9	
Larrea.....	Yes.	No..	.....	Yes.	Yes.	Yes.	167	167	
Maricao.....	Yes.	Yes.	1 day.....	No..	No..	Yes.	60	11	
Mayaguez.....	No..	Yes.	1 day.....	No..	No..	Yes.	1,600	None.	
Maunabo.....	Yes.	No..	.....	No..	No..	Yes.	58	None.	
Naranjito.....	Yes.	No..	.....	No..	No..	Yes.	22	None.	
Patillas.....	No..	Yes.	3 or 4 days.....	No..	No..	Yes.	54	None.	
Peñuelas.....	Yes.	Yes.	.....	Yes.	Yes.	Yes.	82	None.	
Ponce.....	No..	Yes.	.....	No..	No..	Yes.	3,000	5	One of the best in the island. Any authorized plumber does repairs.
Quebradillas...	Yes.	Yes.	Many days.....	No..	No..	No..	9	None.	
Salinas.....	Yes.	No..	.....	Yes.	Yes.	Yes.	131	3	
Utuado.....	Yes.	No..	.....	Yes.	Yes.	Yes.	330	None.	
Yabucoa.....	Yes.	Yes.	Few hours.....	Yes.	Yes.	Yes.	266	5	
Yauco.....	Yes.	Yes.	6 hours.....	Yes.	No..	No..	417	None.	

*Sewerage.*—Besides the improvements in the waterworks which were the natural accompaniment of the installation of Camp "Las Casas" in the Seboruco, the sewers which the cantonment will bequeath to San Juan deserve mention.

On October 25, 1917, complete plans and specifications for the Miramar district sewerage system were approved by this division and construction of same is under way at this writing. It is hoped that the system will be in operation inside of a few months. The plans for the sewerage systems of other parts of Santurce, from Cerra Street eastward to Stop 23, have been completed and will be submitted for approval to this division shortly.

Plans and specifications for the sewerage systems of Yauco were approved on March 27, 1918. The plans were prepared by the department of the interior and included a septic tank for the treatment of the sewage before flowing into the Yauco River; this was required by this division because the river or stream is too small to permit the discharge of untreated sewage into it. The construction of the sewers is now in progress.

On June 8 plans were approved for a sewerage system Central Cambalache, in Arecibo.

In Barranquitas, at our suggestion, a private concrete sewer in Cruz Street was built in May. This sewer is only about 66 meters long, but those living in Cruz Street were glad to get it, no doubt.

Before leaving the subject of sewerage it is pertinent to remark that Mayaguez is badly in need of a good system, and that no efforts should be spared to try to have one built. There are 69 municipalities which have no sewerage systems, but we do not believe there is any which needs it more than Mayaguez, where human excreta is seen floating with papers and offal in ditches and in street crossings inside the city.

*Garbage disposal.*—The Hon. Arthur Yager, governor, appointed a committee in April of this year to investigate and recommend a site for the temporary disposal thereon of garbage from San Juan, Santurce, and Puerta de Tierra, and likewise to select a suitable site for the erection of the crematory plant contemplated by the municipality of San Juan. This committee submitted on April 9 a report on the site for the temporary disposal of garbage, and on April 20 a report on the site for the crematory plant. In the first report the site recommended was a tract of swamp land situated to the west of the road leading from Santurce to Bayamon, at a point 3,100 meters from the beginning of Cerra Street at the Carretera or "Ponce de Leon" Avenue. In the second report the site recommended for the garbage incinerator was a tract of land to the west of the Miramar ward. This site has the following advantages:

First. It is to the leeward of the urbanized zone.

Second. The haul to it is as short as practicable.

Third. It is easily accessible to garbage carts or trucks.

Fourth. It is near a swamp wherein the ashes may be disposed of by filling in.

Fifth. It is on a slope with sufficient grade to permit the installation of the incinerator plant at a depth of about 5 meters below the road or discharge platform of the garbage carts.

Sixth. The land is purchasable at a reasonable price.

At the time of this writing we have learned that the city authorities have appropriated about \$130,000 for the construction of the incinerator plant, and that it will continue to use the actual garbage dump grounds until the plant is completed.

*Board of plumbing examiners.*—Examinations for the master and journeymen plumbers were held in San Juan on October 27. Two out of the seven that took the master plumbers' examination obtained a percentage of 70 or over. Those who took the journeymen plumbers' examinations were apparently better prepared, as out of a total of 18 examined 13 passed.

Eight licenses to work as apprentice plumbers were granted.

The general standing of the plumbers' trade continues to improve as may be seen from the kind of work performed by the plumbers.

A new regulation on plumbing was approved by the executive council to take effect on January 1, 1919. By its terms only one license will be issued in the future, that of plumber, and the licenses of master plumber, journeyman plumber, and apprentice plumber, issued heretofore, will be canceled.

*Building and other plans approved by the division of sanitary engineering for the year ending June 30, 1918.*

Municipality.	Buildings.			Plumb- ing plans.	Total plans.
	New.	Repairs and alter- ations.	Total buildings plans.		
San Juan.....	175	180	355	305	660
Rio Piedras.....	63	36	99	63	162
Mayaguez.....	44	40	84	47	131
Caguas.....	22	32	54	265	319
Aguadilla.....	15	23	38	35	73
Arecibo.....	16	19	35	26	61
Bayamon.....	16	18	34	10	44
Ponce.....	16	14	30	65	95
Sabana Grande.....	21	9	30	2	32
Fajardo.....	16	14	30	40	70
Guayama.....	16	12	28	13	41
Guanica.....	18	4	22	10	32
Comerio.....	14	9	23	32	55
Anasco.....	9	13	22	6	28
Naguabo.....	13	8	21	1	22
Aguada.....	10	11	21	11	32
Cataño.....	11	12	23	.....	23
Total.....	495	454	949	931	1,880
Other towns.....	220	180	400	285	685
Total.....	715	634	1,349	1,216	2,565

Urbanization.....	4
Sewers.....	3
Waterworks.....	2
Other plans.....	35
Total.....	2,009

Municipalities for which less than 20 plans were approved are not enumerated in the above list.

*Buildings and other plans approved by the Division of Sanitary Engineering for the year ending June 30, 1918.*

Municipality.	July.		August.		Sep- tem- ber.		Octo- ber.		No- vem- ber.		Dec- em- ber.		Jan- uary.		Feb- ruary.		March.		April.		May.		June.		To- tal.
	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	
Adjuntas.....	...	...	...	...	1	...	...	...	...	...	1	1	2	3	2	1	3	2	1	...	2	1	1	...	1
Aguada.....	...	...	...	1	...	1	...	...	...	...	1	2	3	2	1	1	1	2	...	...	2	...	...	...	21
Aguadilla.....	1	1	...	2	...	1	5	1	...	...	1	...	1	...	...	...	1	...	...	...	4	5	...	...	38
Aguas Buenas.....	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	...	...	4
Albionito.....	1	...	1	...	...	5	1	1	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	9
Anasco.....	1	1	...	...	...	1	1	1	1	...	2	...	1	1	1	2	1	1	2	1	...	2	3	...	22
Arecibo.....	1	1	...	2	1	6	1	1	4	3	1	4	1	2	...	2	...	3	1	...	...	1	...	...	35
Barceloneta.....	...	...	...	1	1	...	...	1	...	...	1	1	1	2	...	...	1	1	...	...	...	...	...	...	4
Barranquitas.....	...	...	1	1	1	...	...	...	...	1	1	1	2	...	...	1	1	...	2	...	...	...	...	...	11
Barros.....	...	...	1	1	1	...	...	...	...	...	...	...	1	2	...	1	...	...	...	...	...	...	...	...	4
Bayamon.....	1	...	1	1	2	3	2	...	2	1	1	2	2	2	2	...	3	4	2	...	2	...	1	...	34
Cabo Rojo.....	...	1	1	1	1	2	1	1	2	1	2	1	3	1	...	1	1	1	...	2	2	2	1	...	18
Caguas.....	3	4	3	5	2	4	2	...	1	2	5	2	3	...	1	2	3	3	1	2	...	1	5	...	54
Camuy.....	...	...	...	...	...	...	...	1	2	...	1	...	...	3	1	3	...	1	...	1	1	1	...	...	13
Carolina.....	2	...	...	1	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	1	1	...	...	8
Cataño.....	1	1	...	2	1	1	1	2	...	2	3	1	1	...	...	1	2	1	...	1	2	3	2	...	23
Cayey.....	...	...	1	1	...	...	...	1	...	2	3	1	...	...	...	1	1	...	...	...	...	...	...	...	10
Cefba.....	...	...	...	...	1	...	1	...	...	...	...	...	2	1	2	1	...	...	2	...	...	...	...	...	1
Ciales.....	...	...	...	1	...	...	...	1	...	1	...	...	...	2	1	2	1	...	...	...	...	...	...	...	10
Cidra.....	...	...	...	...	...	1	1	2	...	...	...	...	1	1	2	...	...	1	2	...	...	...	...	...	5
Coamo.....	...	...	...	...	...	2	...	1	...	1	1	1	1	2	...	...	2	...	1	2	...	...	...	...	12
Comerio.....	1	1	1	1	1	1	3	2	...	1	1	1	2	1	...	1	1	1	...	1	3	...	...	...	23
Corozal.....	...	...	...	...	...	...	...	...	2	1	1	1	1	...	1	...	...	1	...	2	...	1	...	...	6
Dorado.....	...	...	...	4	...	...	...	...	2	1	1	...	1	1	...	1	1	1	...	1	1	1	1	...	16
Fajardo.....	...	2	...	2	...	2	...	1	2	2	...	2	...	1	1	1	1	1	...	1	1	1	1	...	20
Guanica.....	4	...	1	...	1	2	...	...	1	...	1	...	1	1	1	2	3	...	5	3	1	3	...	...	28
Guayama.....	...	...	...	...	...	...	...	1	...	1	...	1	3	4	2	3	1	1	6	2	2	1	...	...	28
Guaynabo.....	1	...	1	...	...	...	...	...	...	...	1	1	1	...	1	...	1	...	1	1	1	...	1	...	8
Gurabo.....	1	...	...	...	...	...	2	1	1	...	...	...	1	1	...	1	...	1	...	1	...	...	...	...	7
Hatillo.....	...	...	...	...	...	2	...	...	...	...	1	...	1	1	...	1	...	1	...	...	...	1	...	...	6

*Buildings and other plans approved by the Division of Sanitary Engineering for the year ending June 30, 1918—Continued.*

Municipality.	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Total.
	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	C.	R.	
Hormigueros.....	1														1				1				1		3
Humacao.....	1	1	2		1	1	1						1								1				11
Isabela.....				1					1	2	1			2	2		1	2	1				1	1	15
Juana I. Laz.....					1						1														2
Juncos.....			1	2	1	2			1	1			1	1	1		1	2		1		1	1	1	18
Lajas.....	1				1				1																3
Lares.....		1			1							1													3
Las Marias.....																	1								1
Loíza.....			1								2								1						4
Luquillo.....									2				1	1		1					1				7
Manati.....			1	1	1		1		1	1		1		1	1				3	2	2	1	2		18
Maricao.....		1																							3
Mayaguez.....	2	1	1	2	2	1	8	4	6	3	2	6	3	6	1	5	3	2	5	5	6	1	5	2	82
Moca.....																	1						1		2
Morovis.....														1											1
Naguabo.....	1		1	2		1	2	1					2				1	2	1	2			2		21
Naranjito.....	1		1	1		1		1					2		2		1		1						9
Patillas.....													2						1						5
Pañuelas.....									1	1	1				2		1								4
Ponce.....	5	4			3				1	3		2	4	2	1	2			2				1		30
Quebradillas.....									1	1			3		1		1						2		9
Rincon.....									1	1		1				2		1							5
Rio Grande.....							3		2												1	2	1		10
Rio Piedras.....	6	3	3	5	3	4	7	2	12	2	6		3	1	1	3	4	6	4	4	5	4	9	2	99
Sábana Grande.....	1		2			1	1				1		5		1	2		5	1	1	3	3	3		30
Salinas.....									1				1		1		1				2				6
San Germán.....		1	1						2			1		1	1		4	1			2				15
San Juan.....	14	24	14	33	10	16	20	7	10	10	14	13	15	12	17	3	17	14	13	15	21	17	10	17	356
San Lorenzo.....							1	1	1	2	1	2		1	1				2			1	2		15
San Sebastian.....									1				1								1				3
Santa Isabel.....					1		1	1	1				1				1								6
Tos Alta.....	2					1		1									1				1		1		6
Tos Baja.....	1					1	1	1						2			2				1		1		10
Utua.....									1		1		1								1				3
Vega Alta.....						1	2	1						1			2	1	2	1					10
Vega Baja.....					1		1		2											1		1			7
Vieques.....						1						1		1						1		2	3		8
Villalba.....											1														1
Yabucoa.....		1				2	1				1			1	4				1						15
Yauco.....		1			1		1		1	1			3	1	1	1	1	2							14
Total.....	53	48	42	65	47	33	87	39	64	48	51	53	69	55	50	43	62	71	55	64	69	57	54	61	1,349

#### REPORT OF THE MEDICAL INSPECTOR OF THE NORTHERN DISTRICT.

Dr. Victor Gutierrez Ortiz.

The sanitary condition of the towns comprising the Northern District has improved in a positive manner since January 1, 1918, when it came under my charge, to date. To this result several factors have contributed, one being the local inspectors, and the other being the magnificent inclination of our people to obey always the provisions of the law, and finally, the judicious organization of all services in accordance with orders issued by that office.

#### SAN JUAN.

The capital city has not as yet a waterworks system to meet present necessities. In spite of the work lately performed by the municipal administration, water (for which the municipality collects and charges a high rate) is frequently supplied very dirty, especially during the rainy season when the aqueduct supplies the inhabitants of San Juan with water which is filthy and repugnant because of the great quantity of mud which it contains.

San Juan, although the first town of the island, is not, in my judgment, the cleanest. There is great filthiness in the patios, on the roofs and in all those places where refuse can accumulate. I was able to personally verify this fact during an inspection made in the months of April of the hotels and some business establishments in San Juan. I believe that in order to maintain the city in a cleanly condition it would be necessary to organize a body of inspectors who would do absolutely no other work than to make

a daily inspection of the patios, back yards, etc., granting brief periods of time for the removal of garbage that may be found. The toilets in public establishments such as restaurants, inns, etc., leave much to be desired. Some of these establishments, which were found in deplorable condition, were reported at the time.

For the last eight days we had a strike of street cleaners. This has created a serious situation, the municipality not being able to settle the matter in a satisfactory manner, and San Juan and its barrios are in a dangerous sanitary condition. The patios, sidewalks and streets are full of garbage and decaying foodstuffs resulting in a troublesome plague of flies and mosquitoes, constituting a menace to public health.

#### FAJARDO.

This town, in general terms, is found quite clean. A really serious situation was met a couple of months since. The waters from the aqueduct were contaminated with the bacillus of the group "Coli," causing an increase, proved by the statistics, in the number of deaths due to diseases of the digestive organs, during the last two years. It gives me pleasure to state that the municipal authorities cooperated in an efficient manner in the solution of the problem, seconding the initiatives of this department, so that at present the water from the Fajardo aqueduct is in excellent condition.

#### ARECIBO.

This beautiful town lacks an adequate water supply. The sewers empty into a conduit of water known as "Caño de Santiago" which crosses the town and which does not discharge regularly into the sea because of the fact that its mouth is frequently obstructed. The Central Cambalache, located near this city, also has a sewerage system in a very poor condition. The manager of this central has been notified to improve the sanitary installations.

#### AGUADILLA.

This town has improved slightly due to the activities of the local health officer, but on account of the lack of resources on the part of that municipality, the street cleaning service and other sanitary work are neglected.

#### MAYAGUEZ.

We contend without hesitation that this town is found to be the one in the worst condition. The streets are quite dirty on account of the poor street-cleaning service. No sewerage system exists there, but on the contrary there is a system of sewage disposal which is indecent. Many of the said sewers discharge into a creek known as "La Salud" and others into the Yaguez River, and some into the open in the city itself. One of these sewers empties into one of the most central places of the town and at a distance of about 200 meters from the high school, constituting a terrible source of filth and a constant menace to health. The waterworks are insufficient. In general all services, including that of charity, are found in the worst condition.

This is a general report as to the principal cities of my district. Of the towns in the district, San Juan, Rio Piedras, Loiza, Manati, Arecibo, Lares, and Bayamon have good hospitals. There are no hospitals in the remaining towns and in general terms the charity service is quite poor.

At present there are in very successful operation stations for the treatment of anemia in Vega Baja, Morovis, Maricao, Mayaguez, and Lares.

In general terms, as before stated, there is a notable improvement in general conditions of the district. The meat shops, slaughterhouses, milk shops, dairies, provision stores, hotels, drainage of towns, waterworks, anemia service, everything in my opinion is well underway and I anticipate that in a short time statistics will show a positive improvement in the sanitary conditions of the island.

#### REPORT OF THE MEDICAL INSPECTOR OF THE SOUTHERN DISTRICT.

Dr. Pedro Malaret.

I have the honor to render this report in regard to the sanitary condition of the district under my charge and in regard to the work carried on therein during the year 1917-18.

This district was formerly composed of nine towns only; but since the honorable commissioner resolved that the island should be divided into two districts only, the southern district has been composed of 34 towns.

In the last inspection trips I made to these towns during the last month of the year, I was able to observe, and I now state that their sanitary condition is excellent and that in none of them does there exist at present an epidemic of any kind.

When I rendered my report last year (1916-17) the only epidemic then existing was that of measles. This increased during the current year, terminating of its own accord when there was no source of infection. There is no town which has not been stricken to a greater or less degree. In Ponce, although there were only 674 cases reported to the local office, I do not think I err in stating that the epidemic exceeded 3,000 cases. In other towns the number of cases reported also failed to agree with the actual number of cases. In Yauco, for instance, 222 cases were reported to the office; but there is no doubt that they exceeded 500 or 600 cases. In San German 59 cases were reported; but there were a good many more than those. The same thing can be said of Sabana Grande, where not a single case was reported, and of Lajas, Cabo Rojo, and other towns where there existed an epidemic of that disease. In Barranquitas there were but few cases (2 in the town and 32 in the country). This town demonstrates the advisability of isolation, for as soon as the local inspector had knowledge of a case he had it isolated, thus preventing its spread.

This failure to report cases of measles has not all been on the part of the physicians; it was primarily due to the fact that the symptoms being mild the families did not require the attendance of a physician. The greater number of deaths caused by that disease took place in Yauco, where there were 40 deaths, and in Ponce where there were 29.

Besides measles, other transmissible diseases have prevailed and caused some deaths: but none of them have taken such numbers as to constitute an epidemic; however, the spread of tuberculosis, which has claimed a good many victims, is to be feared.

In Ponce there have been 173 deaths this year, and although many it is always a satisfaction to know that there have been 132 less than last year (1916-17) when 305 deaths were caused by the disease.

In Yauco 40 deaths were recorded, Arroyo being next with 33, Guayama 30, Caguas and Utuado 14, and Juncos 5.

Again referring to Ponce in regard to the decrease in mortality, if the municipality would proceed to the construction of a hospital for advanced cases, which has been long under consideration, it is almost certain that this hospital together with the sanatorium and dispensary already in operation would cause a continuous decrease in the number of deaths.

We also had malaria, especially in Ponce, Salinas, Guayama, Yauco, and Cabo Rojo, although all the southern coast is afflicted by that disease. Recently I have been able to observe from data obtained in my visits of inspection, that the number of cases has greatly decreased with a consequent decrease in the number of deaths from that disease. In Ponce, where 224 persons died from malaria last year, there have been only 86 deaths due to the disease this year.

With reference to typhoid fever, we have had only three small outbreaks, which were dealt with so successfully that the measures taken were sufficient to cause the danger of its spread to disappear rapidly. These outbreaks appeared in Guayanilla (6 cases), San German (12 cases), and Sabana Grande (5 cases). In Ponce also the number of deaths due to this infection and to tuberculosis decreased, for where 23 cases occurred in the past year (1916-17), six only have been recorded during the current year.

We have not had any cases of smallpox, except 11 cases reported from Humacao and 2 from Utuado. I can not make any statement about them because I did not see them. Certainly these cases must have occurred before these towns were included in my district.

The other infections that occurred were whooping cough in Guayama, 46 cases; and in Yauco, 13 cases and 3 deaths; and a few cases of diphtheria in Ponce, San German, Humacao, San Lorenzo, and Cayey.

As may be noted from the foregoing, the sanitary condition of the district has been good and is excellent at the moment of writing this report.

Of the 34 towns which form part of this sanitary district, 21 have waterworks in perfect operation and with good water. Santa Isabel has a system of artesian wells also, very inadequate, and 10 towns lack absolutely this great convenience.

The advantages of sewerage systems are enjoyed by Caguas and Cayey only. Yauco will have the benefit thereof very soon, as the work has already been commenced.

All of the towns have slaughterhouses and meat shops in better or worse condition, notable among them on account of their many deficiencies are the slaughterhouses at Caguas, Gurabo, Jayuya, San German, Patillas, and Maunabo, and the meat shops at Sabana Grande, Lajas, Patillas, Humacao, and Las Piedras. Patillas, however, is

about to complete the construction of a new meat shop and will soon commence the construction of a slaughterhouse. There is no municipal meat shop at Cayey, the present ones being private shops which are in fairly good condition.

The street-cleaning service is carried on with fair efficiency in most of the towns; but in the following towns this service is not properly performed: Villalba, Aguas Buenas, Caguas, Juncos, Guayama, Yauco, Humacao, and San Lorenzo.

Of the 34 towns, 23 have hospitals in more or less good condition such as those at Guayama, Humacao, and Yauco, while those at Gurabo, San Lorenzo, Utuado, and Cabo Rojo are in poor condition.

Yauco has just completed from private donation another hospital located near the municipal hospital, for the care of tuberculous patients, and Utuado is about to complete one of concrete construction built by the municipality.

The anemia work has been carried on in various offices, the station located in barrio "Sierra Baja," Guayanilla, having been abolished. Special mention must be made of the work of those of Salinas, Guayama, Utuado, Yauco, Poblado del Rosario, San German, Patillas, Cayey, and Aibonito.

In my visits to the towns I have always tried to inspect personally all those establishments engaged in the sale of foodstuffs, and although a good many deficiencies are yet to be found in some bakeries, provision stores, etc., nevertheless conditions as a rule are being improved gradually.

Owing to the situation brought about by the war and the great advance in the cost of plumbing supplies and apparatus, few sanitary installations have been carried out. However, such installations have reached the number of 700 apparatus, Caguas being in the lead with 400, Cayey with 137, and Yauco, Salinas, and Juncos 40 or more.

The schoolhouses which I inspected during the year are in good sanitary condition as a general rule; but I must except those at Villalba, Jayuya, San German, and Lajas, which leave much to be desired.

During the year 271 inspection visits were made to the towns of the district, as follows:

Inspections.		Inspections.	
Yauco.....	18	Yabucoa.....	7
Perruclas.....	14	Maunabo.....	7
Juana Diaz.....	14	Adjuntas.....	7
Sabana Grande.....	13	Lajas.....	7
Santa Isabel.....	11	Utuado.....	6
San German.....	11	Patillas.....	6
Guanico.....	11	Arroyo.....	6
Guayanilla.....	11	Barros.....	5
Coamo.....	10	Barranquitas.....	5
Cayey.....	10	Jayuya.....	5
Aibonito.....	9	Aguas Buenas.....	5
Caguas.....	9	Las Piedras.....	5
Humacao.....	9	Cidra.....	4
Juncos.....	8	San Lorenzo.....	4
Guayama.....	8	Villalba.....	3
Salinas.....	8		
Cabo Rojo.....	8		
Gurabo.....	7	Total.....	271

In addition to this I was detailed for duty in San Juan for a few days to assist in the work in connection with investigation of cases of typhoid fever, and for the same purpose I also visited Las Marias.

#### ANNUAL REPORTS OF THE RESPECTIVE LOCAL HEALTH OFFICERS, FOOD AND DRUG INSPECTORS, AND VETERINARY INSPECTORS.

##### SAN JUAN.

Besides this report I wish to make a statement of the work of cleaning carried on under direction of this office with the aid of two brigades of prisoners utilized for the purpose. From Stop 20 to the boundaries of Camp Las Casas all garbage in the yards of houses, in lots, and on tracts of land has been removed, and the cleaning of ditches containing water, possible breeding places for mosquitoes, has been effected, preference having been given to those houses where cases of typhoid fever existed.

A brigade of prisoners has been assigned to the District of Puerta de Tierra, and is constantly occupied in cleaning ditches, lots, and lands in said district.

An active campaign is being waged against mosquitoes, the number of laborers in charge of petrolization, under direction of the inspectors, having been increased.

All stables in the urban zone have been ordered closed, and it is expected that they will all have disappeared shortly, for they form the principal focus of infection of the different diseases frequently developing in said zone.



Orders have been issued to inspectors to wage an active campaign against all peddlers of refreshments, so as to do away with these sales on the streets.

And finally I wish to state that the sanitary condition of the city has improved greatly during the last few days, due without doubt to the active cleaning campaign being waged.

Inspections made during the year.....	126, 448
Sanitary deficiencies corrected.....	4, 803
Confiscation of foodstuffs found unfit for public consumption..... pounds..	2, 243

Complaints filed in court:

Convictions.....	178
Acquittals.....	63
Withdrawn.....	4
Quashed.....	2
Pending.....	18
	<hr/> 200

Samples of milk taken.....	257
Vaccinations against smallpox.....	606
Vaccinations against typhoid fever.....	632

PONCE.

*Inspection of school.*—One of the greatest efforts of the local office has been directed toward the sanitation and preferent care of public school. We have paid constant visits to the schools of this city and of the Playa, and have recommended the greatest zeal and activity in connection with public instruction and the sanitary measures relative thereto. As we have endeavored every time that we inspected a public school to report the impressions received in the discharge of such duty to the commissioner, we omit a repetition of the statements on behalf of school hygiene in said reports, but we can not overlook the fact that in none of the schools visited by us did we find that sufficient care was observed in regard to the supply of water used by the children as a common drink. It was noted that sanitary regulations No. 1, relative to sanitary drinking cups, has not been looked upon by the local school board with all the interest the matter demands. And we have been increasingly interested in the inspection of schools because during the entire school term we have labored under the fatal burden of an epidemic of measles which, thanks to our incessant efforts, has been combated without serious loss of population and without recourse to the public treasury for financial aid in the struggle with the disease. We can not fail to state that in our sanitary work we have been greatly aided by the talented teachers of this city. Having realized their high mission and the inherent danger they have not hesitated to render full aid, and have promptly reported all cases of disease suspected of being transmissible, thus allowing the office to apply the proper remedy.

*Transmissible diseases dispensary.*—In compliance with a circular of the department we have established three of these dispensaries, to wit: Mondays for paludism; Tuesdays for tuberculosis; and Thursdays for uncinariasis, the hours between 8 a. m. and 12 m. being given over to this service. Also Fridays are devoted to another class of transmissible diseases worthy of the office's attention. During such time as we have been working in the different dispensaries we have seen and duly treated numerous cases of each of the aforesaid diseases, having at the same time advised them of all sanitary measures in the case. The pamphlet profusely distributed by the department of health was of great aid in this work. From the time we commenced work in the dispensaries to date, the number of cases treated of each disease is as follows:

Paludism.....	116
Tuberculosis.....	63
Uncinariasis.....	319

Four hundred and seventy-nine specimens have been forwarded to the biological laboratory for analysis, the result having been 160 positive cases.

Following the advice of the department we have recommended to the mayor, in letter No. 742, dated January 7, 1918, the assignment to and furnishing of quarters for us in the Tricoche Hospital or at some other place sufficiently isolated, to be devoted to the attendance of such persons as suffer transmissible diseases, and in whom circumstances require rapid and efficient intervention. We have received no reply to our request notwithstanding the fact that intervention by the municipal council was asked of the mayor.

*Hospitals and asylums.*—There are two important hospitals in the city, both belonging to private associations. One is the Asilo de Damas and the other the San Lucas Hospital. They are both well served, and recent reforms made in them have provided all necessary conveniences.

There is also the Tricoche Hospital belonging to the municipality, but there is much to be desired in this institution. Very important repairs are necessary, among them being painting and isolation of the tuberculosis ward. Between this ward and the kitchen and dining rooms actual communication exists. This condition can not be permitted to continue without great risk to the health of other inmates. It is necessary for the municipality to realize the serious responsibility under which it labors, and that it prepare to carry out such reforms as the establishment requires in order to solve this problem of such interest to public health.

The foregoing statements are made because we have had occasion to know that some of the nurses serving in said hospital have been exposed to contagion because of the nonobservance of necessary prophylactic measures and by the deficiencies noted in regard to connection of kitchens, dining rooms, and domestic service.

*Asylums for the aged and for poor children.*—They are very well served under direction of private associations.

*Asylum for the blind.*—Now under the department of health, it is in good condition.

*Asylum for the insane.*—Simply a pen. Its poor condition requires rapid and efficient intervention. It should be closed, for it is unfit for the purpose to which it is destined.

<b>Vaccinations:</b>		<b>Complaints filed in court:</b>	
Against smallpox.....	815	District court of Ponce, adulteration of milk.....	11
Against diphtheria.....	1	Municipal court of Ponce, violation of regulation No. 53.....	1
	816		12
<b>Cases tried:</b>		<b>Deficiencies reported:</b>	
District court of Ponce, for adulteration of milk.....	5	In public establishment for correction.....	681
Same court, crime against public justice....	1		
	6		

## MAYAGUEZ.

*Sanitary improvements effected.*—The sanitary condition of 27 buildings has been improved, their old latrines having been replaced by complete installations made in accordance with regulation No. 7. Nine sanitary installations have been made in as many houses of recent construction. Some tenement houses have been improved within possible conditions, the closing of four of them having been requested since they were considered uninhabitable. The owner of one of them has already offered to make important repairs on the same.

Wherever it has been possible deficient cesspools and old latrines have been replaced by latrines No. 108, 20 of these having been constructed, some of them in the country districts.

Open ditches and sewers have been kept clean and petrolled by the brigade of prisoners obtained for the purpose.

The municipality has made important reforms in the San Antonio Hospital and in the Feria, an annex of the market place, closed because of great deficiencies. There are at present in said building eight places used as eating houses, all of which have kitchens and dining rooms in very good condition. The provision stands were also improved, counters having been put in better condition, thus adapting them to the requirements of article 13 of regulations No. 28.

The public schools are all in adequate buildings, except the Roosevelt School, which occupies an old military hospital, improper for the purpose to which it is devoted.

Transmissible diseases have been given special attention by the department's employees in this office, who have endeavored to have all cases coming under their notice reported, and have studied the origin of each case in order to determine the foci of infection, so as to direct toward them their greatest efforts.

Anemia is another disease to which possible attention has been given, as may be deduced from the report hereinafter contained. Besides the station we have here in the office, which is open and working three times a week, an additional station has been established in the Montoso district, at the place known as Las Vegas, 17 kilometers distant, to which an inspector goes every Monday to attend all cases of anemia that may show up. Said inspector makes the microscopic examinations of feces and furnishes medicines to the patients.

Rural inspection has been extended to the districts of Mayaguez Arriba, Juan Alonso, Limon, Montoso, Quebrada Grande, Rio Hondo, Malezas, Rosario, Sabalos, Guanajibo, and Miradero, of the jurisdiction of Mayaguez, and to the districts of Benavente, Jaguitas, and Guanajibo of the jurisdiction of Hormigueros. It has been the purpose of this office to convey to the country people habits of cleanliness. We have vaccinated as many as possible, and have carefully watched dairies and those plantations in whose living sheds people are crowded.

*Existing deficiencies.*—Asylum for the poor. This building is almost in ruins. The roof, floor, and the inside and outside walls menace ruin. It is in need of general repairs of an urgent nature. In regard to this I have insistently called the mayor's attention to said building, and he has promised to do what he can.

*San Antonio Hospital.*—It is deficient in capacity when the great number of patients who seek admission thereto is considered. The kitchens are not fly proof and the rooms have no sanitary lavatories. The sanitary installation is inefficient, since the water necessary for the closets is lacking. The repairs made to this building were limited to renovation of some of the floors, which were in miserable condition.

*Slaughterhouse.*—The slaughtering pen is not fly proof. The sanitary installation is very poor. The septic pool in its present form is useless. All the departments of the slaughterhouse should be reformed, especially the room where hogs are dressed.

*City hall.*—Almost all the floors are in poor condition. The sanitary installations are deficient for lack of water. The interior walls are dirty.

*Covered market.*—The sanitary conditions are very poor. The water-closets do not work. The meat and fish stands are not fly proof and have a disagreeable exterior aspect.

All municipal buildings such as the slaughterhouse, market, and city hall, show great neglect on the part of those charged with the cleaning thereof, their efforts being almost always limited to some show of care on receipt of notifications from the health inspectors. An ideal cleansing of the slaughterhouse or of the market place has never been obtained.

*Sweeping of streets and collection of garbage.*—Some of the streets are never swept, on the ground that they are not urbanized. Others are swept every six or eight days. The street sweepers form great piles of garbage in various parts of the city, and these remain where they are left for several days until the garbage wagon passes that way. It sometimes happens that said wagon delays six or eight days. The number of sweepers should be increased and two wagons should be utilized, one for the city and the other for the Marina, so that the cleaning of all streets may be carried on with greater regularity.

*Aqueduct and sewerage system.*—The aqueduct is insufficient for the population. Moreover, it lacks deposit tanks. The existing sewers, municipal as well as private, are in the poorest condition. They all discharge directly into the river, into the Salud and Majagual Creeks, and into ditches that empty either into the river or into said creeks. Said ditches and creeks cross many streets, constituting the greatest nuisance conceivable. All of my predecessors have reported these deficiencies, and in my report for 1914 I not only stated these facts, but expressed my great surprise at the installations emptying directly into open ditches, creeks, channels, and sewers. The matter of sewerage and of an aqueduct is of vital importance to Mayaguez, but all efforts of the administration seem to fail in the face of the opinion of the majority of the taxpayers, who will not undertake the responsibility of a loan sufficient to cover the expense attending the correction of this enormous deficiency. Senator Leopoldo Feliú, of the District of Mayaguez, was requested to introduce a bill in the legislature tending to overcome the difficulties in the way of such good purpose. The bill was introduced and passed by both houses, but it contained such defects that it could not be approved by the governor, notwithstanding his good wishes and the support of the department of health.

The high prices of building materials, due to the war being waged by free men against all sorts of slavery, only serve to increase the municipality's difficulties in carrying out this great work of hygiene and culture, and for this reason it can not be expected that the work will be done at present. Moreover, it is an unquestionable fact that all sanitary work in Mayaguez will be fruitless until the aqueduct and sewerage system are established as recommended by this department.

<b>Vaccinations:</b>	
Against smallpox.....	1,610
Against typhoid fever.....	24
<b>Anemia:</b>	
New cases examined.....	1,031
Old cases examined.....	396
<b>Confiscations:</b>	
Foodstuffs.....	83
Samples taken.....	152
Mosquito extinction: Inspections made.....	5,992
<b>Complaints filed:</b>	
Acquittals.....	7
Convictions.....	74
Pending.....	12
Filed.....	12

## ARECIBO.

**Bakeries and confectionaries.**—In our annual report for the last two years we have expressed ourselves in terms quite bitter against said establishments in this city. During the present year we have caused the painting and cleaning of bakeries and confectionaries, but as the buildings where such bakeries are established have been from the beginning in the poorest sanitary condition, it is impossible for this office to do anything towards placing said bakeries in good conditions as to sanitary installations, cleanliness, ventilation, and other requisites of the regulations.

Add this to the sort of anarchy at present predominating in the confection of bread because of the orders of the Food Commission, and the consequence is the very poor quality of bread made in such poor establishments and with such bad ingredients as have been used in place of flour.

**Market, meat shop, and meat stands.**—It was high time for such a progressive city as Arecibo to have a building for use as a market place, and especially a building such as the one under construction and nearing completion. Said building will undoubtedly be one of the best in our country; will be provided with good modern stands, hygienic and sanitary, for the sale of meats; stalls for stores for the sale of foodstuffs; good concrete tables for the sale of vegetables; abundant water and corresponding hose for cleaning the entire building. All stands, meat shops, and provision stores will have their sinks with proper faucet and run-off, and the entire building will have a magnificent modern sanitary installation consisting of shower baths, water-closets, and urinals. The ventilation and lighting of this market-place are incomparable with other building of its kind.

**Inspection in the country.**—Since his arrival in this city Inspector Baldoni has made four or five visits a month to the various country districts of this municipality, having inspected milking sheds, stores, and other country establishments, and having vaccinated in the neighborhood of eight hundred persons against smallpox. He has also caused the construction of over one hundred latrines. Besides, various trips have been made to different districts for the purpose of special inspections.

Relative to Arecibo's great deficiency, the Ganges of Arecibo, vulgarly known as Caño de Santiago, we would be obliged to repeat former statements. We do not desire to be troublesome by expressing over again all the evil we might say on the question of this focus of infection. We can not say when this municipality will be prepared to do something to modify, if not to suppress, the evil conditions of this nuisance.

<b>Confiscations:</b>	
Foodstuffs.....	209
Samples of milk taken.....	34
Specimens of blood taken.....	2
<b>Mosquito extermination:</b>	
Inspections made.....	1,134
Petrolizations.....	142
<b>Vaccinations: Against smallpox.....</b>	<b>852</b>
<b>Complaints filed:</b>	
Acquittals.....	10
Convictions.....	46
Sentenced to jail.....	4
Fined.....	42
	<hr/>
	102
<b>Cases of transmissible diseases reported.....</b>	<b>711</b>
<b>Latrines constructed in the country.....</b>	<b>139</b>

## HUMACAO.

**Public cleaning.**—This service, in charge of the municipal administration, should be the object of special attention, but is badly neglected. When it was looked after by the department of health several years ago we had nine sweepers for the streets and gutters, and three wagons for the removal of garbage. Never, since the municipality took charge of the work has it employed more than three sweepers and one wagon for the same amount of labor, notwithstanding the fact that since then three new sections of some consideration have been urbanized—new streets having been opened and others prolonged—that the population has increased considerably, and that commercial and industrial establishments have grown in number.

With the means available to us it has been impossible to obtain improvement of said service.

**Municipal buildings.**—The aqueduct and hospital are in very good condition, but not so the municipal meat stand, which is badly neglected and which should be put in better hygienic condition.

The slaughterhouse is in good condition, but the septic pools are not. The new mayor assures us that this work will be undertaken in the new fiscal year just commencing.

*Works pending.*—To place it in sanitary condition equal to or better than that of other towns of like or greater importance, this city lacks a good sewerage system. This work is still pending, notwithstanding the fact that the survey has been made and the plans approved.

In applying for a loan for the aqueduct the error of not including the sewerage system was committed. At that time, with cheap materials, both works could have been done jointly as in other cities, thus providing for the municipality greater income with which to face the debt contracted and in all senses improving the hygienic condition of the town.

Such is the principal and most urgently necessary work. Whenever the municipal administration tackles the problem energetically, sanitary work in Humacao will become easy, because the old latrines and cesspools, still so numerous and always offering the danger of contamination of waters and foodstuffs through defective disposal feces, will disappear.

Another convenient work in project is the market place, but it has been postponed for the reason that sufficient funds have not been obtainable.

*Anemia station.*—Since this office established the anemia station a large number of patients has visited the same on the days set apart for this work, seeking examination and treatment. This has contributed greatly to the health of the country people suffering from anemia and disabled for work.

**Transmissible diseases:**

Tuberculosis.....	4
Typhoid fever.....	3
Infantile tetanus.....	1
Diphtheria.....	4
Variceloid.....	18
Whooping cough.....	1
Measles.....	364
Dengue.....	2
<b>Total.....</b>	<b>397</b>
Vaccinations against smallpox.....	724
Samples of milk for analysis.....	25

*Animals destroyed.*—One horse suffering from glanders, and one cow unfit for public consumption.

*Complaints filed.*—Up to June 30, 45 complaints have been filed for violations of different regulations.

*Milk depots.*—Out of 10 milk depots that existed, 6 have been closed for shortage of milk. The remaining 4 are in very good condition.

*Quarantine hospital.*—During the epidemic of measles a quarantine hospital was established in this town for the purpose of rendering aid to persons attacked by the disease. Said hospital was looked after by Dr. Caballero and other employees of this office.

*Bakeries.*—There are five in this town, all of which are in good condition as to cleanliness.

**AGUADILLA.**

Notwithstanding the fact that through the recent construction of the aqueduct and sewerage system this town has solved two problems of great sanitary significance, several problems relative to public health still require solution. These problems are the removal of garbage, general street cleaning, and public drainage.

These public matters require special effort on the part of the municipal council so as to insure a higher degree of cleanliness and a sewerage system that will put an end to the periodical epidemics of malaria scourging the districts of Higüey and Pueblo Nuevo where the privial waters coming down from the mountain to the east of the town discharge.

As a complement of such municipal action this office has great desire to start a campaign against the old system of latrines still existing in the poorer districts of the town; but having attacked the problem we have in practice encountered serious difficulties arising from present conditions which allow of no expenditure by those who would be required to make the same in our efforts to further public sanitation.

Something has been done, but not all that is to be desired. We believe that until the high prices of sanitary materials, cement, and lumber shall have reached a normal level nothing can be done along this line.

*Public buildings.*—City hall: This building, notwithstanding sanitary improvements made thereto by the installation of a complete plumbing equipment, is in poor state of maintenance, and the department devoted to the confinement of prisoners offers no security for their health because of lack of ventilation and light.

*School buildings.*—Save those built expressly for the purpose by the department of the interior, all the buildings equipped for school purposes by the school board, in the rural as well as the urban zone, fail to meet sanitary requirements. The Lafayette School has no sanitary plumbing installation, this being one of the buildings constructed by the department of the interior.

*Hospitals.*—The present hospital is closed because of the poor sanitary and hygienic conditions always prevailing therein due to the indifference of the administration and public apathy. We understand that a sum of money has been collected for the construction of a new hospital, but the same has not yet been commenced. This situation offers serious difficulties in the confinement of seven cases and the quarantine of contagious diseases.

*Slaughterhouse and meat shop.*—These two municipal dependencies are completely neglected. The mayor has been repeatedly notified to apply to the municipal council for sufficient funds to repair and maintain the same. No result has been obtained, and since it is endeavored to maintain them in deplorable hygienic condition, we recommend to the commissioner of health that he address the mayor to the effect that in framing the budget for the fiscal year 1918-19 appropriations be included to meet the expense incident to the repair of the two dependencies referred to, so as to put them in good sanitary condition.

*Cemetery.*—These premises, the superficial area of which is practically covered with old pantheons, is no longer sufficient for further burials. It should be enlarged under good and acceptable conditions, or another should be constructed in accordance with sanitary regulations. The autopsy room has no operating table; there is no sanitary lavatory nor supply of water; the floor is in bad condition; and the whole place needs painting.

*Paving of streets.*—The recent paving of Progreso Street, done by this municipality with the aid of the department of the interior, is seriously deficient at the junction of Progreso and Corchado Streets, such deficiency consisting in the lack of grade of the two culverts and lateral gutters on Corchado Street. It is necessary to correct this deficiency by raising the grade of the culverts and gutters until the waters follow their course and do not become stagnant.

*Transmissible diseases.*—About July 13 and December 18 of the fiscal year just ended an investigation made by the Biological Laboratory confirmed the existence of hydrophobia in two dogs which bit seven adults and two children. The antihydrophobic treatment prescribed for such cases was administered under the personal care and direction of this office.

On October 17, 1917, antidiaphtheric serum was administered to two children living in houses where pseudodiphtheria was recorded. None of the patients nor of the persons prophylactically treated were ever in danger.

Three cases of typhoid were recorded. One was that of Martin Ducós, of the district of Camital Alto, of this jurisdiction; another was that of Casildo Figueroa, of the district of Ceiba, in the urban zone, and the third was that of Lia Quiñones, a teacher in Stahl School, who resides on Comercio Street. They all were cured, and it was established that the cases were not caused by the waters of the aqueduct, but that the first was due to the use in the rural zone where the patient lived, of stagnant puddle water; the second, to the ingestion of the water of the fountain, and that the third came from San German.

One hundred cases of pulmonary tuberculosis were recorded during the year. This plague, which spreads surprisingly, increases in this town because of the lack of means for the treatment of the sick and for their confinement in a place adequate for this universal scourge. The causes determining such a great number of victims are due to lack of sanitary homes, sober and abundant food, and to the crowding of people in the poorer districts where such people observe none of the hygienic measures for the prevention of the disease. Notwithstanding the prophylactic advice daily offered by this office, the disinfections made whenever a death occurs, and the literature on the disease distributed as often as a case is reported, an increase in the number of cases is noticed. This social problem demands the attention of our legislators, and further powers for the department of health, so that it may more effectively intervene "with better results" in the advance of the disease. The varioloid outbreaks were benign and did not take on the alarming nature of an epidemic. Measles had a period of great dissemination, but the few victims of the disease were caused by the complications arising during convalescence. Lack of dietetic regulation caused cases of gastro-enteritis in the poorer quarters. The cases of measles, as well as those of varioloid, received our best attention, disinfection and incineration of all articles coming into contact with the patients having been effected.

On April 16, 1918, one sole case of varioloid was registered. This was the case of Rodulfo Alvarez, a resident of the district of Ceiba of this town. He was immediately quarantined in his home, and a general cleaning of the district was ordered. Eleven hundred and forty-five persons were vaccinated, thus completing the 6,000 vaccinations made during the same months of 1916. This proves that Aguadilla is practically immune from small-pox.

*Technical work.*—During the year just ended, Inspector Santana, Méndez, and Medina had 82 cases decided in the municipal court against persons who violated the sanitary regulations. They also inspected daily all public dependencies as stated in the statistics of annual service herewith inclosed.

*Plumbing.*—Since the aqueduct has been in official operation, 368 sanitary plumbing installations have been made, but at present, due to the increased prices of materials, difficulty is encountered in the way of making further installations. Nevertheless, work of this nature is being done regularly.

*Water supply in rural zone.*—It is an undeniable fact that the water supply of the rural zone from the district of Camasellas to the boundaries of the jurisdiction of Isabela is extremely poor and constitutes a danger to the public health. Prolonged droughts kill agriculture, cause suffering among cattle, and above all, produce an uncinariasic condition in all the residents of said districts. It devolves upon our legislators to look after this matter of capital social importance in order to establish, after having corrected the above-mentioned defect, better health and greater physical vigor among these forgotten country people. The construction of artesian wells would be a factor that would solve the question.

*Stores in rural zones.*—Stores were put in sanitary condition and are inspected on trips regularly made to the country.

*Milking sheds.*—Those in existence are not duly looked after by the parties interested in them. It is necessary constantly to notify said parties of deficiencies and to watch them closely in order to insure compliance with the provisions regulating these industries.

Confiscations.....	pounds..	5, 769
Samples sent to the chemical laboratory.....		134
Samples sent to the biological laboratory.....		45

#### TRANSMISSIBLE DISEASES DURING THE YEAR.

	Cases.		Cases.
Tuberculosis.....	100	Malaria.....	22
Measles.....	160	Typhoid fever.....	3
Varioloid.....	29	Diphtheria.....	3
Uncinariasis.....	19	Infantile tetanus.....	11
Smallpox.....	1		

Complaints filed in court, 89.

In reporting the sanitation work done in this city, we summarize the most urgent sanitary matters pending solution in connection with the more effective sanitary condition that this town should enjoy.

1. General drainage of the outlets that traverse the town, and protection where they empty into the sea in order to prevent the effect of the tides on such outlets.
2. Establishment of a hospital for the treatment of common infecto-contagious diseases.
3. Increase of material and personnel for public cleaning in order to render this service more efficient, better rendered and commensurate with the size of the town.
4. Construction of a modern market.
5. Construction of a modern meat shop in default of a market.
6. Removal of slaughterhouse from the center of the town, and construction of another in an adequate place according to sanitation laws.
7. General repair of streets, pavement of same, and construction of gutters to drain off rain water.

#### CAGUAS.—BUILDINGS AND SERVICES UNDER MUNICIPAL ADMINISTRATION.

*Municipal hospital.*—In 1916 a report was rendered to the department of health by the medical inspector of the northern district in which report he described exactly the antihygienic condition of this establishment, which is at present, thanks to private initiative, notably changed. If any tolerable deficiency is noticeable it is due to limited municipal appropriations.

*City hall, jail, asylum for the insane, fire house, peace court, pound.*—These heterogeneous institutions and services have for a long time been established in a large enough building not of old construction. This absurd conglomeration can not be

given space in a general report. It must be the subject of a special report, which must necessarily be unfavorable to a large extent.

*Municipal slaughterhouse.*—There is but one, with serious defects. The drainage of the tanks when the intestines of cattle and hogs are washed is constantly obstructed, and a repugnant smell is noticed in the place. The septic pools are absolutely inadequate; there is no filtration, and five days after having been emptied they are again full and running over at the edges of the cover. The water after forming a big puddle flows out of it, and following the natural grade of the land runs into the Caguita River. The cement of the floor of the department given over to cattle is falling out, and in this department there is a scale, the use of which is inexplicable since there is another outside for weighing animals, the first being in very filthy condition. The building in general lacks painting on the outside as well as on the inside. The personnel in charge of cleaning is wholly inefficient, there being but one man. This building requires urgent and important repairs.

*Meat shop.*—The meat shop is located on Betances Street, in a building built of masonry in good enough condition of preservation. The municipality has installed two stands for the sale of fresh meats. Their sanitary condition is not all that is to be desired, for the wire netting covering openings is for the most part oxidized and torn. The revolving shelves work difficultly and are very dirty, and on one of them the glass has been substituted by a board, on which the impression of the butcher's fingers is noticeable. The door hinges have deteriorated so that they do not serve their purpose, and ice boxes and electric fans are lacking. The metal bar and hooks used for hanging meat are very dirty and rusted. An enormous wooden chopping block occupies the greater part of the place, and no cuspidors are provided in the exterior section of the place. Complete neglect is noticed in the cleaning of the place and its surrounding, and the whole building, inside and out, should be painted.

*Aqueduct.*—The aqueduct is in good condition so far as the intake is concerned. Said intake is a long distance from town and there is no dwelling in the neighborhood. The same conditions prevail in regard to the margins of the creek known as "Quebradillas," from which it receives water. Upstream from the intake no vicinal road crosses said creek, nor are there any cattle ranches. Judging from its microscopic character the water appears to be excellent, but when left to settle for a short time large quantities of earthy sediment are deposited in the bottom of the container. The filters become obstructed quickly, and the quantity of water is insufficient to meet the needs of the town, it having happened that during the rainy season said waters are heavily charged with organic and mineral substances which foul them noticeably. The caliber of the distributing pipes is small, and to this is due the fact that in some houses having various faucets water can not be drawn from all of them at the same time, the case having happened of a person under a shower bath having to wait for some one to turn off another faucet for a return of water supply for the shower. One of the principal causes of this deficiency is the system established by the municipality of charging for water according to caliber of pipe and not by meter, thus giving many neighbors the chance to waste water without any benefit whatever. The pressure of the water in the main pipe is 110 pounds. The water is not submitted at any mechanical or chemical process of purification.

*Sewerage system.*—Its operation is satisfactory, its only fault being lack of extension. There are important sections of the town not reached by its beneficent action.

*Streets.*—Only those bounding the public square and the several roads crossing the town are in good condition as regards pavement and grade. Drainage is imperfect. Small and half-covered gutters drain the rain water. When it rains hard or persistently these gutters fill up, overflow, and spread the water from one side of the street to the other.

*Removal of garbage.*—Judging from the aspect of the streets, no stranger visiting this town would believe such service existed. Such is the aspect of all the streets, even those of the greatest traffic, where piles of garbage and waste matter exist. It could not be otherwise, because of the insufficient material and personnel employed in this work and the condition of the pavement of almost all the streets. It is desired to clean the streets of a town having the extension of this by the labor of six old men, almost invalids, provided with brooms which they can hardly handle. These old men, charged with the daily task of sweeping the streets, and three carts of 2 cubic meters capacity each, drawn by old and skeleton-like oxen which make three trips a day, is the provision made for the conduction of garbage to a farm located at a distance of 2 kilometers. This office, availing itself of the cordial relations existing between it and the municipal authorities, will endeavor with all interest to correct this very noticeable deficiency as far as possible.

*Supply of fresh meats and conduction of the same to meat stands.*—This service is very satisfactory. It is carried on by means of weekly auctions, and the cattle slaughtered are for the greater part young and fat. All sanitary provisions are observed in the



slaughter house, and the transportation of meat is carried on in adequate vehicles. The small quantity of meat consumed is the only thing attracting attention (estimates show an average of 63 grams a day for each person).

*Buildings under the administration of the local school board and other corporations.*—Public schools: There is only one building devoted to this purpose where hygiene has not been seriously violated. This building is constructed wholly of concrete, and is situated on Muñoz Rivera Street, at the San Juan entrance to the town. The building is occupied by the higher grades, and was erected in accordance with plans drawn by the department of the interior and approved by the department of health. The remaining schools have been established in different houses scattered around town, which houses were in past years used for dwellings, business establishments, or other purposes. In making the necessary reforms no consideration was given to school hygiene, the latrines only having received attention. Said latrines have all been replaced by sanitary plumbing installation, but these are too frequently obstructed.

*School of the Redeemptorist Fathers:* This is a large building situated on Corchado Street, facing Palmer Square. This organization has established a public school where approximately 280 children receive instruction. The building is of concrete and of modern construction.

*Dwellings.*—Ninety-five per cent of these fail to meet hygienic requirements. Constructed without a set purpose, poorly ventilated, without light, and of small capacity, though for the most part having sanitary plumbing installations, they have been built without regard to hygienic conditions, the only purpose being to take full advantage of space. Hence places are seen where the closet occupies less space than a confession booth. There are bathrooms where the tub occupies the entire space, it being a veritable problem to remain in said room after closing the door unless it be in the tub. Many of these small rooms communicate directly with the kitchen, the majority of them being separated from said kitchens by only a frail wooden partition. To remain in these small rooms is practically impossible. These highly antihygienic conditions, together with the unenviable habits of the majority of the persons inhabiting such dwellings, are almost exclusively the predisposing causes of the great number of cases of pulmonary tuberculosis at present existing. This disease tends to spread further each day.

*Tobacco industry.*—There are no great factories for the elaboration of tobacco. Only one factory for stripping tobacco and manufacturing cigars is in operation in this locality. The rest are small manufacturing shops the number of whose workmen does not amount to 10. The stripping industry is carried on on a great scale. There are in existence 8 large and numerous small stripping establishments, which employ about 3,000 people, mostly women. The sanitary condition of these establishments may be termed good, only unimportant violations of sanitary regulations being noticeable. These are all easily correctible.

*Bakeries and confectioneries.*—There are four bakeries in operation in this town. They are all established in adequate buildings, the owners of which comply satisfactorily with sanitary regulations relative to the manner of manufacturing bread. The product, however, because of the rules promulgated by the food commission, does not meet the people's taste, and the latter frequently visit this office to protest against the same. The four confectioneries operated here are in the most deplorable sanitary condition. It would be a highly hygienic measure to cause them to disappear.

*Hotels, eatinghouses, restaurants, cafés, "cafetines," boarding houses, and lodging houses.*—Nothing so disastrously antihygienic as the aforesaid establishments. The application of sanitary regulations is little less than impossible because of the nature of the quarters and the antihygienic habits of their owners.

*Dairies, transportation of milk, and milk stands.*—Six dairies licensed by this office exist in this district, their sanitary condition being good. Besides tolerated places where cows are milked because they number less than eight are very numerous, and normal conditions are desirable at the earliest possible date in order to suppress these places altogether, for their existence constitutes a serious menace to public health. In the transportation of milk from these tolerated places the most varied methods are employed, none of them being compatible with sanitary regulations. Under the pretext that the milk is being carried to private houses it is even sold on the street. The milk depots existing in town number eleven and their transactions are quite limited. The depots are in good sanitary condition, but the same can not be said of the quality of milk, for according to examinations made by the chemical laboratory the samples received have been found to be adulterated.

*Theaters.*—There are two belonging to the same person, one situated on Acosta Street and the other on Dr. Goyco Street. The first was built of concrete and apparently for the purpose to which it is destined. The second, built of wood, is as fit for a theater as for a factory or tobacco-drying shed. The first lacks light and ventila-

tion. The principal exists, front as well as rear, are extremely deficient, and the stage is crowded with junk—old stuff untouched since the remote date on which it was placed there, a fact that can be proved by the thick coat of dust that covers it. The principal object of this theater is the presentation of moving pictures, there being two machines installed in wooden booths, wholly unprotected against fire. The other theater is in same condition as the one described, and in both places the plumbing is insufficient and is constantly in a very deplorable state of filthiness.

*Transmissible diseases.*—Typhoid fever: The descent in the curves of morbidity and mortality determined by this disease is really satisfactory. Said descent became noticeable as soon as the aqueduct and sewerage system were opened for public service. This descent logically had to happen as soon as the principal foci of infection—the numerous wells supplying the town with water and the many latrines—were forced to disappear. The majority of the latrines were built very near the wells and contaminated their waters by filtration.

*Tuberculosis.*—This disease silently but constantly and surely is ravaging this town. It spreads to an alarming degree, it being the unfortunate lot of this town to occupy the first place in the statistics of mortality in the island. The predisposing, the principal cause, is the disastrous antihygeinic condition of the majority of dwellings, making relations between persons more constant and immediate. The tobacco industry exploited here on a large scale can only be considered as a relative predisposing cause on account of the irritation produced in the mucous membrane of the respiratory organs by the fine dust shed by the leaves in great quantities. This irritation weakens the power of resistance of said membranes. The stooping position may have some influence, since it attenuates the movements of inspiration and expiration at the vertices of the lungs. This office believes that the only means of arresting the spread of the disease are the isolation of all cases of tuberculosis, whether open or otherwise, to avoid probable contagion in the latter case and to cure the same, and in the former to prevent certain contagion. Such action should be reinforced by methodical sanitation of all dwellings in the town and a rapid sanitation of contaminated quarters once the patient has left them.

*Anemia.*—This office is charged with the diagnosis and treatment of persons suffering from this disease; but its work is not efficient because despite the large number of cases existing here, very few voluntarily seek the aid of the office in order to submit to a classic treatment. The cause of this is the fear inspired by the purgatives which according to reports are thought to accentuate the disease instead of curing it. The numerous quacks and herb mongers who exercise their routinary profession in combination with this or that druggist are responsible for this erroneous opinion.

*Work of the office—Plumbing.*—Plans approved, 264. Plans disapproved, 41. Water-closets installed, 376. Sinks, 531. Showers, 323. Lavatories, 104. Notifications served for the correction of deficiencies, 766. Samples of milk taken, 21. Confiscations, 20. Biological specimens, 63. Complaints filed, 120. Convictions, 97. Acquittals, 23.

#### VEGA BAJA.

On June 19, 1917, I was appointed by the commissioner of health to the office of inspector (field force) of sanitation district B 6, comprising the towns of Vega Alta, Morovis, Vega Baja and part of the jurisdiction of Dorado.

On July 2 of the same year I took my oath of office and established my residence in Vega Baja where I encountered many difficulties; but thanks to the tact used by me in sanitary matters, I was able to commence, in unison with the mayor, a cleaning campaign which, though arduous and difficult, because of the bad habits of the neighbors, was carried out until an effective cleansing of the town was obtained. All the streets of the town were piled high with dirt and garbage.

Cleaning was commenced on the following day, and it was not two weeks before the streets were absolutely free of dirt and garbage. On December 18, 1917, I made a general cleaning of the town, for which purpose I sought the cooperation of several residents who owned wagons. These gentlemen are Messrs. Tomas Tulien, Eugenio Otero, Pio Sanchez, Ramon Alonso, Arturo Guerra, Enrique Catony, Andres Guerrero, Forteza Hermanos, Sucs. de Sobrino y Cia., and Rubert Hermanos.

The first of these gentlemen furnished one wagon and driver each, and the others six wagons in two days, there having been removed 175 wagonloads of garbage, junk, leaves, etc., thus leaving the town and the back yards of houses absolutely clean.

Business establishments also greatly attracted my attention, for there was much to be desired with regard to their cleanliness. The establishments and the back yards pertaining thereto were quite filthy and full of garbage, boxes, junk, casks,

etc. The zinc on the counters was for the most part in poor condition. They had no garbage cans and refuse was swept into the streets which were therefore constantly dirty. By serving notice on them that they must provide themselves with garbage cans as stated by the regulations on the subject, I got them to put themselves in the best condition of cleanliness, and they now present the best aspect in this connection.

The pushcarts devoted to the sale of sweets were not protected against flies, nor were their bottoms lined with zinc. The sweets were placed on paper which was absolutely dirty. Notice having been served on their owners to correct such sanitary deficiencies, this was done in the shortest time possible, spring hinges having also been placed on the covers, so that they are now in the best condition possible—clean and fly proof.

The meat stand belonging to Messrs. Sobrinos & Co. was also the object of repairs, the wire netting thereof having been fixed as well as the ice box, and the entire place having been painted.

There were two wholly neglected milk depots in town. Their owners did not sell milk at these depots, but carried on the trade in their homes, the depots being closed. I prohibited the sale of milk in private houses, and there are to-day in town four depots in good condition and provided with the utensils necessary for the handling of milk. The liquid sold is of good quality.

Victory bread has improved greatly during the last few days because of the use of corn flour and due to the reason that the bakers are learning to manufacture the same.

*Meats.*—Those sold for public consumption, beef as well as pork, are of good quality.

*Water.*—It is taken for consumption from cisterns. Most of the houses have their respective cisterns and those that have not purchase water from those that have. Said cisterns have been conveniently cleaned during the year, and the water taken therefrom is of good quality.

The tanks for storing water all lacked covers. They have all been made mosquito proof, the same having been done with the aforesaid cisterns which were all uncovered, the water being drawn by means of a pail to which a rope was attached. Notification was served on the owners of these cisterns that they must provide them with lids and pumps. They have all been repaired and very few of them lack pumps. This is due to the fact that they were unobtainable on the market.

*Removal of garbage and street cleaning.*—In regard to the first of these services there is much to be desired, since the municipality has but one oxcart, which is hardly sufficient. Some days garbage remains piled in the streets, its removal being impossible. This service is not rendered Sundays. There are at present two sweepers, and they keep the streets clean.

*Latrines.*—When I took charge of this town the latrines were in the poorest condition as to cleanliness. Many of them were at the point of overflowing, and all lacked sanitary covers. This was the cause of various complaints filed in court against the owners of the houses so as to oblige them to clean the latrines and make them fly proof by providing sanitary covers. Some of them were closed and others destroyed on the ground that they were public nuisances. There is something still to be done along this line.

The work of the inspector at the anemia station is quite hard if the fact is borne in mind that there is only one employee for the preparation of cards, the microscopic examination of new cases, and the filling out of cards for patients newly examined. This work is all done without the least aid, and the inspector has to pay from his scant salary for the services of a servant to wash glasses and sweep the office.

*Transmissible diseases.*—As to transmissible and contagious diseases, physicians hardly report them to this office. They often send specimens directly from their own offices to the proper laboratory which replies directly to the doctor sending the specimen. Hence in many cases the sanitation office is unable to take the necessary measures.

Tuberculosis, malaria, and filariasis are the most common diseases in this town, and they spread more each day for lack of an adequate place for isolation. The efforts of the inspector to isolate cases are of no avail because the municipality does not possess sufficient means to aid those who would willingly submit to isolation. Therefore, those unfortunates must idle on the streets.

There is a house called hospital or emergency hospital which in my opinion is of no benefit to the community. It is merely a question of having a place where to practice first cures on the wounded or sick who come down from the mountains and to shelter them for a few days.

This place is looked after by Dr. J. M. Armaiz, municipal charity physician, by Mr. Marcene, minor surgeon, and a woman who looks after and cares for the sick. It is kept in good condition as to cleanliness.

Forty-one inspection trips have been made to the country districts of the jurisdiction, 546 rural homes having been inspected, all of which have constructed their latrines according to present circumstances. The 48 trips ordered by the department's circular No. 62 have not been made because it is difficult to hire a horse, the horse belonging to the service having been taken sick, in which condition he is still found, though I doubt not that he will be well in a few days and able to render service.

All the rural dwellings visited present a good aspect as to cleanliness, the owners caring to keep the surroundings clean and also the interior of the houses and the part under the floors. The district of Algarrobo, which I am inspecting at present, and which is one of the largest, beginning at the town and ending in the jurisdiction of Manatí, is one where I have found least anemics.

Said district lacks running water, and the neighbors use spring and cistern water, the latter furnished by proprietors who supply it to the poor who live on their lands.

I have noticed that the breeding of hogs has decreased considerably in the jurisdiction. Few are the houses where hogs are found penned or at any distance therefrom.

There is in the vicinity of the town a lagoon formed by the overflow from the river, which is a malarial focus. It is situated on lands belonging to the Succession of Eugenio Lomba, leased to Central San Vicente. This lagoon and the uncovered tanks were the cause of numberless mosquitoes in town, but thanks to the measures adopted in this regard they have diminished greatly, though they have not entirely disappeared.

Sanitary deficiencies corrected.....	2,972	Samples of bread.....	3
Transmissible diseases:		Antityphoid vaccinations.....	46
Tuberculosis.....	41	Vaccination against smallpox.....	1,727
Typhoid fever.....	3	Foodstuff confiscated, pounds.....	12,445
Varioloid.....	7	Dairies provided with milking places.....	7
Measles.....	47	Dairies without milking places.....	4
Complaints filed.....	96	Milking places closed.....	6
Samples of cow's milk.....	13		

## ANNUAL STATISTICS OF CASES TREATED AT THE ANEMIA STATION, 1,264

Cured.....	641
Abandoned treatment.....	394
Deaths.....	2
Under treatment.....	227
	1,264

## LATRINES CONSTRUCTED IN THE RURAL DISTRICTS OF VEGA BAJA.

Almirante Norte.....	55	Puerto Nuevo.....	58
Almirante Sur.....	36	Quebrada Arenas.....	48
Algarrobo.....	117	Río Arriba.....	34
Calba.....	31	Río Abajo.....	24
Cibao.....	18	Yaguajay.....	62
Cabo Caribe.....	31		
Puñado Afuera.....	49	Total.....	596
Puñado Adentro.....	33		

## FAJARDO.

**Aqueduct.**—A certain order of shellfish having been noticed in the waters of the aqueduct of this town, the forwarding of ice box for the purpose of sending samples to the Biological Laboratory was requested. The analysis made showed that the waters were heavily charged with bacillus coli.

Inspections having been made along the river and the creeks running into it upstream from the intake, it was found that on the banks of said river and creeks there stood a great number of huts without latrines, and many more with latrines in poor condition and quite close to the water.

It was also found that much water was wasted from faucets in town, for which reason the water was supplied directly without time for settling at all.

The construction of latrines was immediately ordered in all houses unprovided with them, as well as the destruction of all those in poor condition or too close to the water.

Measures tending to prevent the waste of water from faucets were taken, and water is now supplied after settling for 24 hours.

A sample of water sent to the biological laboratory, taken from one of the deposit tanks after settling for 24 hours, was found to be as follows: "Bottle No. 39—Water from one of the tanks averaged 205 bacteria per c. c. Contains no bacillus coli."

Specimens sent to chemical laboratory, 24.

Houses closed, 2.

Vaccinations against smallpox, 204.

## YAUCO.

*Private dwellings.*—The sanitary condition of these has improved noticeably. There are still many unprovided with sanitary plumbing installations, but this work has been left pending, in accordance with instructions received, to be done shortly, since work on the sewerage system of the town is about to commence. This office made 4,159 inspections of private dwellings during the year.

*Tenements.*—I have endeavored to obtain the greatest improvement possible in these houses worthy of so much attention. However, not all of them are in regulation condition, but the sewerage system having been completed, the close of those not meeting all sanitary requirements will be applied for. Nevertheless, they have been greatly improved during the year. Two hundred and sixty-one inspections were made in them during the year.

*Kitchens.*—Those of hotels, eating houses, restaurants, etc., have been made fly proof. They were inspected 2,745 times during the year.

*Schools.*—With the exception of Columbus School they are in good sanitary condition. The plumbing in Columbus School will be renovated when the sewerage system is finished. Thirty-six inspections of schools were made.

*Hospital.*—The municipal hospital has been noticeably improved during the year. Visits of inspection, 24. A hospital for tuberculous patients has been constructed, but has not as yet been equipped, and is therefore not in use.

*"Cafetines."*—They are in good sanitary condition. Foodstuffs therein have been protected against flies and dust. Inside and out they have all been painted with oil paint or whitewash.

*Hotels.*—There are three in this town. Two of them are in very good condition, but the other (Borinquen), although somewhat improved, does not fully meet regulation requirements: but this is due to the fact that it will be moved to another house during the current month, where all sanitary requirements will be fulfilled before occupancy.

*Eating houses.*—All eating houses that did not meet requirements were closed, and those now existing are in satisfactory condition. Protection against dust and flies has been fully provided.

*Dairies.*—There are 8 dairies in the municipality of Yauco provided with milking places and 20 without them. There are 8 milking places in use and 5 abandoned or out of use.

*Slaughterhouse.*—The municipal slaughterhouse of Yauco is at present in very good condition. The only defect is that the pipe draining the water used in washing and the blood of animals killed discharges into a ditch instead of into a cesspool.

*Removal of garbage.*—This service is quite deficient. Some streets have not been swept for some time. The wagons and laborers never visit most of the streets above Buena Vista.

*Water supply.*—Very satisfactory so far.

*Stray animals.*—During the last few months this office has had to pay much attention to this subject. It seems that, due to some misinterpretation, certain ladies belonging to the local food commission made a house-to-house visit informing families that they each were entitled to keep one hog on the premises for the purpose of obtaining fats. This was sufficient motive to overrun the northern part and a section of the southern part of the town with hogs. Some are still left, but none will remain shortly.

*Samples of milk.*—Four samples were forwarded to the laboratory, and the persons from whom they were taken were all sentenced by the district court of Ponce.

*Sanitary appliances installed.*—Water-closets, 19; sewers, 1; baths, 3; sinks, 16; showers, 12, and lavatories, 9.

*Mosquito inspection.*—Three thousand eight hundred and eighty-three were made.

*Petrolization.*—Five hundred and sixty-six were carried out.

*Vaccinations.*—Against smallpox, 5.

## COMPLAINTS FILED IN COURT.

Convictions.....	137
Acquittals.....	11
Quashed.....	2
Pending.....	3

153

## TRANSMISSIBLE DISEASES.

Measles.....	222
Malaria.....	13
Whooping cough.....	13
Tuberculosis.....	10
Typhoid fever.....	3
Diphtheria.....	2

## ANEMIA STATION.

Under treatment from the previous year.....	184
New cases this year.....	1,732
Cases cured this year.....	1,765
Under treatment.....	151
	<hr/> 3,832

*Remarks.*—The water supply to the district of Barinas is a matter of great importance. The water used by the inhabitants of said district is of the worst quality and is constantly contaminated. Water from an irrigation ditch is used, into which ditch all the filth from the slaughterhouse is discharged. If the commissioner could obtain the laying of a pipe from the aqueduct to some place where the inhabitants of the district could go to obtain good water it would be a great service. The poor water now used is the cause of a great number of deaths in the district.

## ISABELA.

## TRANSMISSIBLE DISEASES.

Frambesia.....	20
Malaria.....	36
Syphilis.....	1
Tuberculosis.....	9
Typhoid.....	2
Varicella.....	2
	<hr/> 83

## SPECIMENS OF BLOOD AND SPUTUM SENT TO THE LABORATORY.

Malaria.....	37
Typhoid.....	2
Tuberculosis.....	9
Syphilis or frambesia.....	1
	<hr/> 49

Malarial patients cured by this office, 36.

Frambesia patients sent by this office for treatment to the quarantine hospital, 14.

Patients presenting ulcers and gummata as a consequence of frambesia and who are not under treatment, 15.

## JUANA DIAZ.

*Public establishments.*—All public establishments have been greatly improved as to sanitary condition; but there are still many deficiencies to correct in municipal establishments. These deficiencies are:

*Slaughterhouse:* There is no laborer to do the cleaning. Neither is there a hose or brooms. The walls, hooks, and surroundings of the building are very dirty.

*Meat shop:* It is not fly proof; there is no water supply, and no one to do the cleaning. The drain is in poor condition, and the whole place needs painting.

*Hospital:* The kitchen communicates with the wards for the sick. This is a deficiency the correction of which is urgent.

*Public fountains.*—These have no drains and are permanent breeding places for mosquitoes.

*Aqueduct.*—The water supply is taken from the Guayabal Lake canal. It is muddy most of the year, and when the tank was cleaned during this week there was over one and one-half feet of mud in the bottom.

*Cemetery.*—In good condition.

*Conduction of corpses from the hospital to the cemetery.*—This is carried out in a common casket. According to reports this casket has been in service for over six years.

*Street sprinkling.*—There is one unit wagon devoted to this service. It takes three-quarters of an hour to fill it, and it empties in 15 minutes. Only a couple of streets are sprinkled.

*Street sweeping and cleaning.*—This service is very deficient.

*City hall.*—The building is good, but the latrine bad.

*Jail.*—Quite good, but the latrine does not meet requirements.

I have several times written the mayor in regard to the deficiencies stated.

## Transmissible diseases:

Measles.....	93
Malaria.....	100
Tuberculosis.....	11
Intestinal tuberculosis.....	1
Typhoid fever.....	1
Diphtheria.....	1
Colibacillosis.....	2
Parotiditis.....	1
Total.....	<hr/> 270

*Confiscations.*—Foodstuffs, 8.

*Samples taken.*—Milk, 4.

**Mosquito extinction:**

Inspections.....	1,372
Notifications.....	367
Petrolizations.....	2,502
<b>Complaints filed in court:</b>	
Convictions.....	73
Acquittals.....	22
<b>Total.....</b>	<b>95</b>

**ARROYO.**

**Camples sent to laboratory:**

To examine for malaria.....	12
To examine for B. K.....	6
Milk.....	2
<b>Total.....</b>	<b>20</b>

**Latrines constructed:**

In town.....	12
In the country.....	40
<b>Total.....</b>	<b>52</b>

**Mosquito extinction:**

Inspections.....	94
Notifications.....	54

*Vaccinations.*—Against smallpox, 95.

**Complaints filed in court:**

Convictions.....	45
Acquittals.....	5
<b>Total.....</b>	<b>50</b>

*Anemia.*—Cases treated at station, 88.

*Travel.*—Trips to rural districts, 20.

*Lectures.*—Six.

**CIALES.**

*Aqueduct.*—Having visited the dam I have been able to observe that only a little cleaning is necessary of the surroundings, and I advised the nearest neighbors to observe the greatest vigilance in favor of public safety.

The water tanks are well situated, and I have only had to recommend to the municipality that they be cleaned oftener instead of once a month as has been the practice.

*Other services.*—On my visits to the country I have ordered the construction of latrines. The condition of the town is very good, there being no cause to lament epidemics.

**Transmissible diseases:**

Uncinariasis.....	2
Whooping cough.....	1
Tuberculosis.....	4
Enteric fever.....	1
Malaria.....	3
Colibacillosis.....	1
Typhoid.....	11
<b>Total.....</b>	<b>23</b>
<b>Specimens sent to laboratory:</b>	
Blood.....	1
Sputum.....	1
<b>Total.....</b>	<b>2</b>

**GUANICA.**

*Hospitals.*—The Guanica Hospital as well as the two at Ensenada are in fairly good condition. At the present time plans for a new hospital at Ensenada have been presented. The service is looked after by the municipal physician and nurses.

*Public schools.*—The one in town as well as those of the country districts are in good condition, having filters and abundant water.

*Milking places.*—These have been constructed in accordance with the model plans of the department. They are inspected once a week to insure cleanliness and hygiene therein. They are at present in good condition, and the milk produced at these places is shipped to Sabana Grande, Yauco, Lajas, Mayaguez, and Ponce in refrigerator

wagons duly equipped for such service, the milk being preserved in sufficient ice. Milk from these places is also sold in the town of Guanica.

*Milk depots.*—They are in good condition as to cleanliness and hygiene, and are inspected daily. One of these depots is at Ensenada, and is inspected once a week.

*Guanica aqueduct.*—It is deficient, and being moved by power there are times when it is out of working order for days and even weeks at a time because of damage to the machinery. Well water, drawn from a depth of 150 feet, is salty and unfit for cooking. At present there are but 50 connections with the aqueduct because the piping runs through only certain streets of the town.

*Ensenada aqueduct.*—The Ensenada aqueduct, moved by power, has 150 connections. It works without interruption throughout the year. The majority of the houses are provided with sanitary appliances. The water is pleasant to drink.

*Transmissible diseases.*—There are always some cases of malaria in Guanica, due to the conditions of the terrain and to the deficient drainage of the town. Outside of these cases of malaria there is no other disease to attract the attention of the department.

*Removal of garbage and cleaning of streets.*—These municipal services were completely neglected, appropriations therefor having become exhausted. At present there is only one sweeper and one wagon for the removal of garbage. After July 1, when the new municipal budget takes effect, more men will be engaged exclusively for these services.

## PATILLAS.

*Meat shop.*—The meat shop will be completed this month. The extension of the cemetery will be commenced next month, and then the new slaughterhouse will be built.

Transmissible diseases:		Mosquito extinction:	
Measles.....	82	Inspections.....	92
Tuberculosis.....	5	Notifications.....	68
Malaria.....	1		
Smallpox.....	1	Complaints filed in court:	
Variceloid.....	1	Convictions.....	9
Uncinariasis.....	335	Acquittals.....	2
Total.....	445	Total.....	11

## FOOD AND DRUG INSPECTORS.

## NORTHERN DISTRICT.

Carlos A. del Rosario.

On January 2, 1918, I took the oath of office as food and drug inspector for San Juan, Rio Piedras, Catano, and Bayamon.

Consequently this report covers the second half of the fiscal year ending June 30, 1918.

During the six months just past, I visited each and every public establishment in San Juan dealing in drugs or foodstuffs, such as dry stores, pharmacies, provision warehouses and stores, ventorrillos for the sale of vegetables, slaughterhouses and meat depots, bakeries and confectioneries, cafés and cafetines, hotels, and eating houses, etc. I also inspected the same establishments in the towns of the district.

I delivered to the chemical laboratory for analysis 26 samples, of which 8 were of drugs and 18 of different foodstuffs.

I swore to three complaints filed in the district court of San Juan for adulteration of drugs.

I made 10 certificates of destruction, having condemned the following adulterated or decomposed foodstuff:

American cheese.....	pounds..	25
Parmesan cheese.....	do....	36
Codfish.....	do....	400
Smoked herring.....	do....	750
Potatoes.....	do....	2,520
Condensed milk, 57 cases containing.....	cans..	2,736
Pickled herring, 99 pounds.....	pounds..	19,800

## ANDRES RODRIGUEZ.

For the purpose of submitting them to special proceedings, such as washings, selection, cleansing, fumigation, etc., I confiscated provisionally the following articles:

	Pounds.		Pounds.
Rice.....	12,570	Wheat flour.....	1,400
Corn flour.....	68,500	Beans.....	54,539



## Articles confiscated and destroyed because they were unfit for public consumption:

	Pounds.		Pounds.
American cheese.....	2,479	Beans.....	388
Bologna sausage.....	476	Mixed wheat flour.....	125
Dried fruits.....	50	Beef.....	135
Ham.....	575	Prunes.....	8
Corn flour.....	7,342	Herrings.....	1,125
Wheat flour.....	4,000	Mortadella sausage.....	3,000
Codfish.....	8,586		
Lard.....	167	Total.....	29,031
Bread.....	575		

Samples forwarded to the chemical laboratory for analysis, including official samples and others:

Olive.....	1	Corn flour.....	1
Bottled soda water.....	1	Soup paste.....	7
Lard.....	3	Bread.....	44
Pork.....	4	Sugar.....	1
Common salt.....	5	Water.....	5
Malt.....	1	Milk.....	131
Drugs.....	56		
Wheat flour.....	6	Total.....	313
Beans.....	47		

## SOUTHERN DISTRICT.

Samples sent to laboratory.....		87
Denatured foodstuff.....	pounds.	15,611
Foodstuffs condemned and destroyed.....	do.	49,217
Drugs destroyed.....	grams.	46,765
Foodstuffs sifted, cleared, and selected.....	pounds.	349,226
Trials held.....		5
District court of Mayaguez, adulteration of milk.....		4
District court of Guayama, adulteration of milk.....		1
Complaints filed in court.....		6
District court of Mayaguez, adulteration of milk.....		4
District court of Guayama, adulteration of milk.....		1
Municipal court of Ponce, adulteration of drugs.....		1

## VETERINARY INSPECTION.

## NORTHERN DISTRICT.

I investigated an epidemic among bovine cattle in the municipality of Carolina where many calves died of the reigning disease.

The cause of the disease was found to be symptomatic carbuncle, and hence I ordered vaccination to be practiced, thus checking deaths.

I also investigated another epidemic among oxen and cows in the same municipality, the disease being found to be Texas fever. I recommended treatment and prophylaxis. Among the calves belonging on a farm in said jurisdiction I found contagious dysentery and also recommended treatment and prophylaxis.

In San Sebastian I also reported two epidemics which were found to be parotitis and verminous pneumonia. Treatment and prophylaxis was also recommended. On one farm in this jurisdiction cattle died of hunger and cachexia after harvest time, their owner being under the impression that they died of some disease.

In Naguabo, Humacao, and Fajardo I observed epidemic outbreaks of anthrax and recommended vaccination, disinfection, and isolation of sick cattle.

From Aguadilla came a report of a supposed epidemic among bovine cattle. Upon investigation no such epidemic was found to exist. Cattle were dying of hunger.

In Rio Grande I found a disease among bovine cattle, which turned out to be the disease known as malign endemo (endemo Maligno).

Glanders is systematically disappearing in Porto Rico. This shows that the disease will be completely eradicated in a very few years.

## SOUTHERN DISTRICT.

During this year I have quarantined 44 animals suspected of having glanders. Twenty of them were killed after positive reaction upon analysis in the laboratory.

Five animals suffering from Lamparonex have been killed and seven quarantined.

Two antitetanic injections have been administered in Cayey to a horse belonging to the department, and to five animals belonging to the department, which had been in Ponce.

Two hundred and seventy-five mules have been imported from Santo Domingo through the ports of Mayaguez, Ponce, and Ensenada.

During this year an infection developed among bovine cattle on the plantations of this municipality, in Juana Diaz, Mayaguez, and Lajas. The disease was diagnosed as anthrax and symptomatic carbuncle. The different owners were made to vaccinate their cattle and no further cases have been reported.

A number of heads of cattle was imported this month from the Virgin Islands, and was inspected by the veterinary inspector of the northern district.

Several cases of the disease known as "Ranilla" have appeared among the bovine cattle on a farm in Coamo. An injection of a 4 per cent solution of atoxyl was administered, the animals being now much improved as to symptoms. Some of them have been cured. This leads me to believe that the disease is *Trypanosomiasis Bovina* and not poisoning with the prussic acid contained in "Marunguey" (*Zamia intermedia*) and other plants thought to cause this disease.

#### BLIND ASYLUM—ANNUAL REPORT OF THE MANAGER.

The following statement shows the movement that took place in the Blind Asylum during the fiscal year, and demonstrates his efficient technical services performed in same:

	Curable.	Not curable.	Total.
Number of patients on June 30, 1917.....	48	32	80
Admitted during the fiscal year 1917-18.....	144	43	187
<b>Total</b> .....	<b>192</b>	<b>75</b>	<b>267</b>
Number of patients discharged.....	135	39	174
Number of patients on June 30, 1918.....	57	36	93

#### CAUSES WHICH DETERMINED THE DISCHARGE.

Cured.....	112
Upon request (not cured).....	56
Died.....	6
<b>Total</b> .....	<b>174</b>

Percentage cured over the number of discharges of curable patients, 83.

From the attached report of the oculist-physician of the institution it will be seen, among other things, that the number of operations performed was 102, there having been recorded 283 cases of intercurrent diseases and 8 deaths.

Fifty-six permits for admission were cancelled owing to the fact that the interested persons did not present themselves within the period of 15 days granted by the department; while a few, through new applications or extension granted, were admitted and obtained the charitable assistance of the institution.

The administrative work has been limited only and exclusively, to the end that there should be no excess of expenditure from the various appropriations, in the budget for the institution; to maintain an efficient care of all persons who have been admitted, and to maintenance of that order and behavior that should exist in establishments of this character; we have had no notice of any complaint against this administration.

From the statement of our expenses on record in that department, it will be observed that if there was an excess of expenditure from some items in our budget, it was due to the exorbitantly high prices in the market. These excesses were compensated by savings in other items of the budget, covered by a transfer of funds approved by the honorable the Governor of Porto Rico in the sum of \$525 made from the subhead "Subsistence" to increase the original appropriations for "Medicine," "Clothing and bedding," "Incidentals" and "Transportation of patients." By this last transaction all of our obligations were duly covered without any debt against this administration, there remaining, in all probability, a balance of about \$300.

#### REPORT OF THE OCULIST-PHYSICIAN.

I have the honor to submit for your consideration the report of the technical work performed in the blind asylum during the fiscal year 1917-18, which work is shown in the accompanying statement.

The summary of said statement is as follows: There were 144 curable patients admitted, and 43 really granted admission as incurable, making a total of 187. The number of operations has been 102, and that of intercurrent diseases 283, six having died. Of the number of curable patients or those subject to treatment, 135 were discharged, and of these 135 patients, 112 were discharged as cured.

The diseases of the eye that have prevailed have been: Cataract, 76, pterygium, 18, atrofia pupilla, 14; and choroiditis, 10.

There should be recorded among the diseases treated that of cancer in both eyes of a girl 6 six of age, a case which required two enucleations of the unfortunate child.

Comparing this report with that for the previous year, an increase of 24 in cataracts will be noted, also an increase of 5 in pterygium; 7 in choroiditis, and in atrofia pupilla an equal number.

The causes of these increases may be attributed to physiological misery due to the lack of food; and also to the mechanical action of dust upon pterygium, and syphilis contracted or hereditary in the case of choroiditis.

*Comparative statement showing the number of patients admitted to the Insane Asylum during the fiscal years 1916-17 and 1917-18.*

Months.	1916-17			1917-18		
	Men.	Women.	Total.	Men.	Women.	Total.
July.....	3	4	7	7	15	22
August.....	2	3	5	42	20	62
September.....	5	1	6	10	1	11
October.....	1	3	4	5	4	9
November.....	6	6	12	7	6	13
December.....	6	4	10	6	5	11
January.....	5	5	10	8	13	21
February.....	4	1	5	9	7	16
March.....	3	7	10	14	5	19
April.....	11	2	13	25	1	26
May.....	11	14	25	16	6	22
June.....	42	21	63	18	7	25
Total.....	99	65	164	167	90	257

*Statement showing patients discharged each month during the fiscal year 1917-18.*

Months.	Men.				Women.			
	Cured.	Discharged upon request.	Died.	Total.	Cured.	Discharged upon request.	Died.	Total.
<b>1917.</b>								
July.....			4	4			2	2
August.....	2	2	2	6		1	2	3
September.....	3	2	2	7		1	2	7
October.....	4	4	2	10	2	4		6
November.....	1	1	2	4	3	2	1	6
December.....	4	4	8	16	7	2	1	10
<b>1918.</b>								
January.....	24	1	3	28	5	2		7
February.....	1	2	7	10	7	2		9
March.....		4	8	12	2	5	3	10
April.....	9	2	3	14	1	3		4
May.....	3	2	4	9	3			3
June.....	1	3	10	14	2	3	2	7
Total.....	52	27	53	132	36	25	12	73

*Number of patients in the blind asylum at Ponce showing the towns from which admitted and their curable or incurable condition.*

	Subject to treatment, curable.		Permanent or incurable.		Total.
	Males.	Females.	Males.	Females.	
Adjuntas.....	2				2
Aguadilla.....	1		1		2
Agua Buenas.....			1		1
Añasco.....	1	1			2
Arecibo.....	3				3
Arroyo.....	3	2	1		6
Barranquitas.....	1				1
Cabo Rojo.....	2	2			4
Carolina.....			1		1
Cayey.....			1		1
Coamo.....	1	2			3
Fajardo.....	1	1			2
Guánica.....	1				1
Guayanilla.....	2				2
Hatillo.....				1	1
Isabela.....				1	1
Juana Díaz.....		1			1
Lejías.....	1				1
Mayaguez.....	1		3	1	5
Ponce.....	5	13	9	5	32
Quebradillas.....	1				1
Río Piedras.....		1			1
Sabana Grande.....		1	1		2
Salinas.....				1	1
San Germán.....	1		1		2
San Juan.....	1		4	1	6
Santa Isabel.....			1		1
Toca Baja.....			1		1
Utuado.....	2	1			3
Yabucoa.....			1		1
Yauco.....	1	1			2
Total.....	31	26	26	10	93

*List of all patient admissions and discharges, cured and not cured and deaths, from July 1, 1917, to June 30, 1918.*

Months.	Male.	Female.	Admitted.		Discharged.		Cured.	Not cured.	Dead.
			Tem- porary.	Perma- nent.	Tem- porary.	Perma- nent.			
1917-18.									
July.....	11	6	10	7	10	4	4	9	1
August.....	18	6	16	8	12	5	9	7	1
September.....	10	7	12	5	11	4	10	5	.....
October.....	8	10	14	4	12	6	12	6	.....
November.....	6	6	10	2	15	3	11	7	.....
December.....	4	5	8	1	10	1	10	.....	1
January.....	9	7	10	6	10	1	9	2	.....
February.....	10	6	15	1	15	5	13	7	.....
March.....	12	6	15	2	9	2	9	2	.....
April.....	4	5	9	.....	10	3	8	5	.....
May.....	9	2	7	4	15	4	12	4	3
June.....	10	10	18	2	6	1	5	2	.....
Total.....	111	76	144	43	135	39	112	56	6

*Diagnoses of the patients admitted to the blind asylum, curable and incurable, during the fiscal year, 1917-18.*

	Male.	Female.	Children.	Total.
Albugo.....	3	4		7
Amblyopia.....	2			2
Atrophy of the pupil.....	1	2		3
Atrophy of the eye.....	3	1		4
Atrophy of both eyes.....	5	1		6
Atrophy of the papilla.....	9	5		14
Blepharitis.....		2		2
Cataracts.....	51	25		76
Congenital cataracts.....			2	2
Glaucomatous cataracts.....	4	5		9
Cyclitis.....		1		1
Chronic conjunctivitis.....	4	4		8
Chorea-retinitis.....	2			2
Choroiditis.....	6	4		10
Ectropion.....	1			1
Staphyloma of the cornea.....	1	3		4
Strabismus of one eye.....	1			1
Strabismus of both eyes.....			1	1
Glaucoma.....	4	1		5
Hernia of the iris.....	1			1
Iridocyclitis.....	3	3		6
Iritis.....		1		1
Keratitis.....	4	2		6
Interstitial keratitis.....	4	5		9
Leucoma.....	5	2	2	9
Nephelion.....	7	1	1	9
Neuritis.....	3	1		4
Sympathetic ophthalmia.....	3	3		6
Pterygium.....	9	3		12
Simblepharon.....		3		3
Lacrimal tumor.....		4	1	5
Ulcers of the cornea.....	1	2		3
Total.....	137	94	7	238

*Operations performed in the blind asylum during the fiscal year 1917-18.*

	Males.	Females.	Children.	Total.
Cataracts.....	39	9	2	50
Enucleation.....	7	9	1	17
Strabotomy.....	1			1
Iridectomy.....		1		1
Paracentesis.....	1			1
Artificial pupil.....	3	2		5
Pterygium.....	12	12		24
Paring of the cornea.....	1			1
Simblepharon.....		1		1
Tatuage.....			1	1
Total.....	64	34	4	102

INTERCURRENT DISEASES.

Disease of the heart.....	1
Anemia.....	65
Arteriosclerosis.....	3
Intestinal organs, diseases.....	60
Sciatic.....	1
Hemiplegia.....	1
Catarrhal fever.....	80
Gastralgia.....	30
Neuralgia.....	40
Cerebral hemorrhage.....	1
Total.....	28

DEATHS.

Disease of the heart.....	1
Arteriosclerosis.....	3
Acute enteritis.....	1
Cerebral hemorrhage.....	1
Total.....	6

## ANNUAL REPORT OF THE SUPERINTENDENT OF THE INSANE ASYLUM.

This report in regard to the insane asylum for the fiscal year just ended is accompanied by tables and classification showing admissions, diagnoses, mortality, discharges upon request of members of the family, cured, etc., as also economical and administrative details concerning the institution.

Deficiencies are indicated and recommendations made consistent with the progressive improvement of establishments of this character, which deserve the most scrupulous attention.

Although we recognize the abnormal financial situation we are confronting, we trust that this asylum, where 473 unfortunate lunatics are obtaining medical treatment, will receive in future more attention from the legislative power, so that operating in a wider field of action and with larger resources we shall be able to continue our struggle within the means of medical science, returning sanity to many of those unfortunates.

*Building.*—In regard to the general condition of the building, we will not add anything to that stated so many times by our directors of health and men of science; all opinions agree in that this building at present is inadequate because it is not suitable for an insane asylum; but if we are compelled by circumstances to continue using same, it is necessary to carry out certain improvements and repairs in the wooden floor of the department for men, as well as improvement and repairs in some of the floors in the department for women, and the repainting of both interior and exterior of the building.

The patients in the infirmary at present are menaced owing to the danger of contagion existing on account of the lack of an adequate place for the isolation of various cases of tuberculosis existing there among other patients. A measure of great urgency would be the erection of a pavilion for the isolation of those tuberculosis cases, which could be constructed near the place occupied by the infirmary for male patients located on the north part of the building.

*Inmates.*—The total number of patients of both sexes in the asylum on June 30, 1917, was 421, and the number on the same date of the current year is 473, an increase of 52 patients this year as compared with the previous one.

*Discharges.*—The number of patients discharged as being cured during the time for which this report is made has been: Men, 52; women, 36; a total of 88. The total number of discharges for the same reason during the previous year was 30, resulting in an increase of 50 per cent of discharges for being cured in the year just ended.

The patients who have left the establishment at the request of members of their families (not cured) amount to 52 of both sexes, the majority of them being pay patients, many of whom could have been discharged completely cured were it not for the haste on the part of their relatives, who for unknown reasons, and in some instances for futile reasons, have deprived them of the advantages afforded them by the institution.

*Diseases.*—During the year we have not had in the asylum any disease of an infectious nature. The disease which prevailed the most, enteritis, being also the one causing the greatest number of deaths, in spite of the energetic measures adopted to combat same, without which the number of deaths would have been greater.

*Mortality.*—The mortality during the year has been of about 13 per cent, the causes of death being shown in the corresponding table of those comprising this report. Attention should be invited, in treating of the number of deaths that have occurred, to the miserable and pitiful physical conditions in which the unfortunate lunatics come to this asylum from the hospitals and municipal jails. Frequently patients are admitted, especially men, who, after having spent a greater or lesser period of time locked up in a room in a hospital or municipal jail, arrive at this asylum depicting misery all over—weak, already a prey to disease, against which all treatments fail, and a few days afterwards that unfortunate, who exhausted all his energies and who suffered all kinds of miseries in a close prison cell, passes away to increase the percentage of deaths of the institution.

*Mental diseases.*—As will be observed in the corresponding table, the mental disease which has contributed the greater number of patients to the asylum this year has been manic depressive insanity.

*Treatment.*—The usual treatment followed with all the patients has been the one advised by medical science in such cases and which is practically in harmony with the means at the disposal of this asylum. Quite a number of analyses of excreta have been made, and in a good many cases the existence of uncinaria and other intestinal parasites were found; all of such patients have been submitted to an adequate treatment. One of the most efficient works carried out was that of the analysis of blood (Wassermann reaction) by the biological laboratory of the department of

health, with the result that a large number of positive cases were found. To a few of the pay patients, who defrayed the expenses, the neo-salvarsan treatment was administered, with very encouraging results as to improvement of their mental disease; but unfortunately to the majority, the indigent patients, it has been impossible to submit them to such an expensive treatment, as the asylum has available the amount of \$1,000 only for the year for medicines and supplies, there being expended twice that amount for medicines of common use, and it would not be wise to expend considerable sums for preparations of recognized merit but of very high cost. About this matter I respectfully call the careful attention of the department.

In connection with the technical work during the last few months, with the enthusiastic cooperation of various local expert surgeons, who by humanity and love of their noble profession gratuitously and gladly rendered their cooperation to the physicians of the institution, operations of high surgery were performed twice a week most successfully in every case upon patients of both sexes.

The necessary surgical instruments for these operations were generously furnished by those fellow surgeons themselves, to whom we are greatly obliged, as the asylum lacks its own adequate instruments, and although some have been ordered, for they are very much needed, nothing has been heard just yet, and it appears that it will take some time yet on account of the endless steps (always troublesome to the good operation of the asylum) that must be followed in such purchases.

*Minor surgeon.*—In the budget that went into effect on January 1 of the current year the position of minor surgeon was created, a position which was notably needed for the better and most strict compliance with the medical prescriptions.

*Budget.*—I must earnestly call attention to small appropriations made in the budget for the various expenditures of this asylum; all of them are very low and scanty, particularly so at present, when the high prices of all articles, by virtue of the abnormal circumstances we are confronting, which are such that if we compare the present prices with those in effect in the market a little more than a year ago, are found increased from 100 to 300 per cent. From the notes herewith the cost of the various articles used in six months in the asylum will be seen, and I mention only this period of time because it is the one covered by the budget which went into effect January 1, 1918, and terminated on June 30, 1918.

The item for subsistence of patients and employees is fixed in the budget at the rate of 20 cents per capita per day, and with this amount the subsistence is not possible, provided that a variety of foodstuffs be included. The inmates are given, besides the breakfast consisting of coffee with milk and bread, three courses for dinner and three for supper. This diet could not very well be reduced without danger of their physical health, as the majority of the patients are suffering from nervous exhaustion. For those patients in the infirmary, and who must be subjected to a milk diet, same amount is assigned, and if only 20 cents were used for milk for a patient he would be given a trifle more than a quart, and it would be useless to try to ease his suffering by means of drugs if he were to succumb due to lack of nourishment. The amount of three quarts of milk being necessary for a patient, it would cost 50 cents—that is, almost three times the amount appropriated—for milk only, a diet which greatly increases as the patient, already convalescent, is put on an increasing diet by advice of the physician.

In normal times, with the utmost economy, I do not doubt that the expense for subsistence may be covered with the amount appropriated, but it is impossible at present, and an allowance of 30 cents per person would permit meeting the expenses decently without the tribulations we have to suffer at present to harmonize heavy expenses with small appropriations.

*Repairs and improvements.*—In order to improve the appearance of the reception room used by the families visiting pay patients it was necessary to do away with the dormitory for janitors. To provide a dormitory for the janitors it was necessary to divide the storeroom, transferring the clothing and bedding to another room on the upper floor of the building and the food supplies to the space formerly used for clothing and bedding, which is larger and well ventilated, and the space formerly used for the storage of subsistence will be prepared for a dormitory for the janitors.

An ice box has been obtained for the refrigeration of milk, so that it will reach the patients in that condition, for the purpose not only of making this article of food more agreeable to the taste but to reduce the liability to contamination to which milk is exposed as well as the large number of germs that it contains on account of the defective refrigeration to which subject while in the milk depot.

The method of drawing water from the well located in the court of the department of indigent women patients, a work formerly done in a crude and deficient way with a hand pump operated by patients, was substituted by a gasoline power pump which fully accomplishes the desired results. In connection with this pump two tanks were installed, one of iron for the storage of water for use in the cleaning of galleries,

rooms, etc., and another one of reinforced concrete with a capacity of about 8 cubic meters, which is connected to the laundries by pipes also installed recently. The laundries are supplied with water from the well, this having resulted in a saving in the use of water from the aqueduct which may be estimated at from \$25 to \$30 a month.

The iron kitchen range formerly in use was in very poor condition and a new one of reinforced concrete and fire bricks was built in accordance with plans prepared in the office of the sanitary engineer. Wood was the only fuel that could be used with the old kitchen, and the acquisition of this particular kind of fuel is becoming more difficult each day, there having been no wood available in the building at times. The average monthly wood consumption was from 6 to 7 cords, at a cost of over \$40, and at present about 80 pounds of mineral coal are used and a very small amount of wood. The total consumption of coal per day when no wood is available will be a little over 100 pounds, at a cost, in spite of the high price at present, of very little over \$30 a month.

The work of screening the doors and windows of the kitchen to make them fly proof was commenced, but it has not been completed on account of the lack of time.

In the department of cells for women, there existed six which were dark and poorly ventilated, and on account of being located on the side of the building overlooking the court and receiving light and air therefrom, they prevented those located just opposite them from getting the necessary light and ventilation.

The necessary work is being carried out to put into practice the scheme of the commissioner of health to fix the patio of the building so that it may be used as a place for the recreation of patients, same not having been so used before on account of the danger that it afforded. The construction of a reinforced concrete ceiling with an area of 150 square meters is nearing completion. At present the height of the walls inclosing the court are being made higher, there remaining only the plastering of the walls to finish the work. In order to square this tract of ground it was necessary to construct some interior walls, demolish others, and to remove one of the laundries to another place and also to make other changes.

In order to obtain a more efficient work in the washing of clothes and at the same time to discontinue the practice of it being done by the female inmates, which results in hard and imperfect work, the installation of a sanitary laundry, operated by electrical power is being contemplated, and persisting in such idea, which we believe to be of great convenience for the establishment, several attempts toward its attainment have been made, fairly good proposals for the machines having been received. The machine would be already in operation were it not for the difficulties which have to be overcome in all such purchases.

In case this laundry plant is not obtained, it is recommended that the personnel be increased by three laundresses, as also the number of positions of cooks should be increased, for at present it is necessary to use female patients who are quiet to assist in the washing of clothes and in cooking. This is not practical nor advantageous, as such patients could be engaged in other works more in harmony with their mental condition.

*Age, color, and civil condition of patients remaining in the insane asylum on June 30, 1918.*

	Men.	Women.	Total.
10 to 20 years.....	14	11	25
21 to 30 years.....	77	43	120
31 to 40 years.....	71	76	147
41 to 50 years.....	45	64	109
51 to 60 years.....	21	35	56
61 to 70 years.....	6	7	13
71 to 80 years.....	1	2	3
Total.....	235	238	473
White.....	159	147	306
Colored.....	76	91	167
Total.....	235	238	473
Single.....	157	138	295
Married.....	68	66	134
Widowed.....	5	26	31
Divorced.....	0	2	2
Unknown.....	5	6	11
Total.....	235	238	473



*Age, color, and civil condition of patients remaining in the insane asylum on June 30, 1918—Continued.*

	Men.	Women.	Total.
Catholic.....	196	209	405
Spiritualist.....	9	7	16
Protestant.....	7	5	12
Evangelist.....	3	1	4
None.....	8	2	10
Unknown.....	12	14	26
Total.....	235	238	473

*Occupations of patients remaining in the insane asylum on June 30, 1918.*

Occupation.	Men.	Women.	Total.
Farmer.....	29	4	33
Mason.....	3		3
Barber.....	3		3
Laborer.....	17		17
Carpenter.....	5		5
Cigarmaker.....	16		16
Cook.....		3	3
Merchant.....	11		11
Seamstress.....		3	3
Salesman.....	1		1
Domestic.....		201	201
Employee.....	9	1	10
Student.....	6	2	8
Fireman.....	1		1
Signalman.....	1		1
Blacksmith.....	3		3
Printer.....	1		1
Industrialist.....	8		8
Engineer.....	2		2
Journeyman.....	53		53
Farm laborer.....	18		18
Laundress.....		9	9
Sailor.....	1		1
Mechanic.....	2		2
Physician.....	2		2
Messenger.....	2		2
Nursery maid.....		1	1
Nurse.....		1	1
Workman.....	1		1
Fisherman.....	1		1
Painter.....	1		1
Teacher.....	1		1
Peddler.....	1		1
Tailor.....	2		2
Servant.....		2	2
Soldier.....	2		2
Shoemaker.....	6		6
Without occupation.....	17	7	24
Unknown.....	9	4	13
Total.....	235	238	473

*Age of patients discharged and cause of discharge during the fiscal year 1917-18.*

Age.	Men.				Women.			
	Cured.	Discharged upon request.	Died.	Total.	Cured.	Discharged upon request.	Died.	Total.
10 to 20 years.....	3	2	1	6	1	2		3
21 to 30 years.....	23	6	19	48	16	10	3	29
31 to 40 years.....	17	10	14	41	9	9	1	19
41 to 50 years.....	6	5	13	24	7	1	6	14
51 to 60 years.....	3	4	3	10	3	2		5
61 to 70 years.....			3	3			1	1
71 to 80 years.....					1		1	1
81 to 90 years.....						1		1
Total.....	52	27	53	132	36	25	12	73

*Diagnoses of mental diseases of the patients discharged and cause of discharge during the fiscal year 1917-18.*

Diagnoses.	Men.				Women.			
	Cured.	Discharged upon request.	Died.	Total.	Cured.	Discharged upon request.	Died.	Total.
Involuntional insanity.....					4	3	3	10
Ephobic insanity.....		1		1	1			1
Periodical insanity.....		1	2	3	11	4		15
Manic depressive insanity.....	7	4	9	22	7	5	2	14
Puerperal insanity.....					7	2		9
Alcoholic insanity.....	12	8	15	35	2	1	2	5
Senile insanity.....					1	1	2	4
Confusional insanity.....					2	1		3
Melancholia.....					1			1
Dementia precox.....	4	2	6	12		1	1	2
Cerebral syphilis.....	1	1	2	4				
Mallucinos.....	1			1				
Acute mania.....	2			2				
Subacute mania.....	1	1		2				
Moral insanity.....	2	3	4	9		1	1	2
Moral insanity.....	1			1				
Epileptic insanity.....	5	2	5	12				
Toxic insanity.....	2			2		1	1	2
Arteriosclerotic insanity.....	2		2	4				
Priosis due to uncinariasis.....	1			1				
Pseudo paralysis, alcoholic.....	1		1	2				
Imbecility.....	1	1	3	5		1		1
Idiocy.....			1	1				
Parkinson disease.....		1		1				
General paralysis.....		1	3	4		1		1
Dementia.....		1		1				
Hysterical insanity.....						2		2
Undiagnosed.....						1		1
<b>Total.....</b>	<b>52</b>	<b>27</b>	<b>53</b>	<b>132</b>	<b>36</b>	<b>25</b>	<b>12</b>	<b>73</b>

*Mental diseases of patients remaining in the insane asylum on June 30, 1918.*

	Men.	Women.	Total.
Manic depressive insanity.....	33	69	102
Dementia precox.....	26	35	61
Manic.....	11	2	13
Chronic mania.....	2	3	5
Periodical insanity.....	18	21	39
Epileptic insanity.....	22	5	27
Alcoholic insanity.....	38	9	47
Pseudo paralysis, alcoholic.....	1		1
Toxic insanity.....	2	1	3
Confusional insanity.....	2		2
Puerperal insanity.....		15	15
Hysterical insanity.....		6	6
Involuntional insanity.....		30	30
Dementia paranoides.....	39	13	52
Melancholia.....	4	1	5
Imbecility.....	13	6	19
Idiocy.....	3	2	5
Senile insanity.....	1	3	4
Epileptic and imbecile.....	1		1
Dementia.....	6		6
Arteriosclerotic insanity.....	1		1
Cerebral syphilis.....	1		1
Chronic amentia.....	1		1
Cheromania.....	1	1	2
Erotomania.....		1	1
Monomania.....		1	1
Undiagnosed.....	9	5	14
<b>Total.....</b>	<b>235</b>	<b>238</b>	<b>473</b>

*Diseases which caused the death of patients according to psychoses during the fiscal year 1917-18.*

	Dementia pre-cox.		Alcoholic insanity.		Paranoia.		Senile dementia.		Toxic insanity.		M. D. I.		Involuntary insanity.		Epileptic insanity.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Pulmonary abscess.....		1														
Enteritis.....	3		3	2							4		1	1		
Tuberculosis of the lungs.....	2		1		1	1					1			1		
Asistolia.....			1				1									
Septicemia.....											1					
Pellagra.....									1							
Hemoptysis.....										1						
Exhaustion of the nerves.....			6							1			1			
Desgaste nervioso y enteritis.....			1		1					1						
Cerebral congestion.....			1													
Pneumonia.....					1											
Chronic paranoia.....					1											
External violence.....			1		1											
Epilepsy.....															3	
Nephritis.....											2					
Gastro enteritis.....	1															
Cerebral concussion.....										1						
Uremia.....			1													
Chronic enteritis.....																
Cerebral hemorrhage.....													1			
General paralysis.....																
Cerebrospinal syphilis.....																
	6	1	15	2	4	1	2	1	9	2	3	5				

	Arteries sclerotic insanity.		General paralysis.		Pseudo paralysis alcoholic.		Imbecility.		Periodical insanity.		Idiocy.		Cerebral syphilis.		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Pulmonary abscess.....															1
Enteritis.....	1		1		2		21		1						19
Tuberculosis of the lungs.....															7
Asistolia.....															3
Septicemia.....															1
Pellagra.....															1
Hemoptysis.....															1
Exhaustion of the nerves.....	1		1				1		1		1				13
Desgaste nervioso y enteritis.....															2
Cerebral congestion.....															1
Pneumonia.....															1
Chronic paranoia.....															1
External violence.....															1
Epilepsy.....					1										4
Nephritis.....															2
Gastro enteritis.....															1
Cerebral concussion.....															1
Uremia.....															1
Chronic enteritis.....			1												1
Cerebral hemorrhage.....															1
General paralysis.....													1		1
Cerebrospinal syphilis.....													1		1
	2		3		1		3		2		1		2		65

SURGICAL OPERATIONS PERFORMED ON PATIENTS DURING THE FISCAL YEAR 1917-18.

Lipoma excision.....	2
Appendectomy.....	2
Curettage.....	2
Abdominal paracentesis.....	1
Hystorectomy.....	1
Ventral suspension.....	3
Intestinal resection.....	1
Colporrhaphy and perineorrhaphy.....	1
Hydrocele operations.....	3
Total.....	16

*Comparative statement showing the number of patients admitted to the insane asylum during the fiscal years 1916-17 and 1917-18.*

Months.	1916-17			1917-18		
	Men.	Women.	Total.	Men.	Women.	Total.
July.....	3	4	7	7	15	22
August.....	2	3	5	42	20	62
September.....	5	1	6	10	1	11
October.....	1	3	4	5	4	9
November.....	6	0	6	7	6	13
December.....	6	4	10	6	5	11
January.....	5	5	10	8	13	21
February.....	4	1	5	9	7	16
March.....	3	7	10	14	5	19
April.....	11	2	13	25	1	26
May.....	11	14	25	16	6	22
June.....	42	21	63	18	7	25
Total.....	99	65	164	167	90	257

*Statement showing patients discharged each month and the cause therefor during the fiscal year 1917-18.*

Months.	Male.				Female.			
	Cured.	Discharged upon request.	Died.	Total.	Cured.	Discharged upon request.	Died.	Total.
1917.								
July.....			4	4			2	2
August.....	2	2	2	6		1	2	3
September.....	3	2	2	7		1	2	7
October.....	4	4	2	10	2	4		6
November.....	1	1		2	3	2		5
December.....	4	4	8	16	7	2	1	10
1918.								
January.....	24	1	3	28	5	2		7
February.....	1	2	7	10	7	2		9
March.....		4	8	12	2	5	3	10
April.....	9	2	3	14	1	3		4
May.....	3	2	4	9	3			3
June.....	1	3	10	14	2	3	2	7
Total.....	52	27	53	132	36	25	12	73

#### ANNUAL REPORTS OF THE SUPERINTENDENTS OF THE BOYS' AND GIRLS' CHARITY SCHOOLS.

There have been admitted to these asylums orphan children and others whose poor and destitute condition have entitled them to official protection, although their parents were living.

The following table shows the movement of inmates in these schools during the fiscal year 1917-18:

	Boys' charity school.	Girls' charity school.	Total.
Number of inmates on June 30, 1917.....	270	175	445
Admitted during the fiscal year.....	44	42	86
Total.....	314	217	531
Discharged during the fiscal year.....	38	42	80
Number of inmates on June 30, 1918.....	276	175	451

*Degree of instruction of children admitted.*

	Boys.	Girls.	Total.
Did not know how to read.....	21	24	45
Knew how to read.....	13	4	17
Knew how to read and write.....	10	14	24
<b>Total.....</b>	<b>44</b>	<b>42</b>	<b>86</b>

*Age of the inmates.*

	Boys.	Girls.	Total.
7 years old.....	5	2	7
8 years old.....	7	10	17
9 years old.....	26	10	36
10 years old.....	23	20	43
11 years old.....	20	25	45
12 years old.....	28	30	58
13 years old.....	44	22	66
14 years old.....	34	17	51
15 years old.....	23	20	43
16 years old.....	40	10	50
17 years old.....	20	9	29
18 years old.....	4	.....	4
19 years old.....	2	.....	2
<b>Total.....</b>	<b>276</b>	<b>175</b>	<b>451</b>

From the report rendered by the visiting physician of the schools, which follows, the prevailing condition of salubrity is shown, as also the affections treated during the year.

*Enrollment and degree of efficiency of educational work.*

Grade.	Boys' charity school.			Girls' charity school.		
	Enroll-ment.	Promoted.	Not promoted.	Enroll-ment.	Promoted.	Not promoted.
First.....	36	36	.....	23	22	1
Second.....	55	53	2	23	21	2
Third.....	50	47	3	25	25	.....
Fourth.....	39	37	2	25	24	1
Fifth.....	41	39	2	25	25	.....
Sixth.....	31	29	2	20	19	1
Seventh.....	10	10	.....	19	19	.....
Eighth.....	8	8	.....	15	15	.....
<b>Total.....</b>	<b>270</b>	<b>259</b>	<b>11</b>	<b>175</b>	<b>170</b>	<b>5</b>

## Percentage of promotions:

Girls' charity school.....	97.14
Boys' charity school.....	96.93

## STATUS OF INMATES UPON LEAVING THE SCHOOL IN THE BOYS' CHARITY SCHOOL.

Of the 38 pupils discharged during the year 1917-18—

12 were graduates of the eighth grade.

1 was taking the eighth grade.

5 were taking the seventh grade.

6 were taking the sixth grade.

7 were taking the fifth grade.

5 were taking the fourth grade.

2 were taking the third grade.

Total, 38.

Of said pupils, those who could, on account of their age, attended the manual training classes and obtained a knowledge of: Carpentry, 6; shoemaking, 8; cement construction, 4; plumbing, 5; music, 15.

Two were graduated as journeyman plumbers.

Passed the Civil-Service examination.—Second-grade clerk, 2; third-grade clerk, 2.

## GIRLS' CHARITY SCHOOL.

Of the 42 pupils who left the school—

- 2 were graduates of the second grade.
- 4 were graduates of the third grade.
- 3 were graduates of the fourth grade.
- 6 were graduates of the fifth grade.
- 4 were graduates of the sixth grade.
- 3 were graduates of the seventh grade.
- 5 were graduates of the eighth grade.
- 14 were graduates of the ninth grade.
- 1 was graduate of the tenth grade.

Total, 42.

The inmate Felicita Cruz Medina was given employment in the same asylum at a salary of \$300 per annum.

Juana Albert Solá, at the request of the superintendent, Miss Santaella, secured a scholarship from the American philanthropist, Mr. Esterbrook, of Boston, who will support her in the normal school until she finishes the commercial course.

Of the remaining girls, six pursue studies at the high school, and the youngest girls continue attending the public schools, owing to the fact that their respective parents have improved their financial condition, and the balance make their living by sewing and other work.

The 19 girls who finished their eighth grade took the complete course of machine and hand sewing; principles of cutting, embroidery, drawn work, straw work, lace work, mending clothes, and marking work, drawing and painting, and everything included in the domestic science course.

The other girls of the third, fourth, fifth, sixth, and seventh grades also learned, according to age, drawn work, embroidery, sewing, domestic science, drawing, painting, etc.

## MANUAL TRAINING—BOYS' CHARITY SCHOOL.

*Plumbing.*—Forty pupils attended the plumbing course daily, two of whom took the required plumbing examination, and the department of health issued licenses to them as journeyman plumbers, as previously stated.

The plumbing course referred to, besides keeping in repair the sanitary plumbing of the building, has performed the following work:

- (1) Sanitary installation and drain of a new cement sink in the kitchen.
- (2) Installation, near the bathroom, of the toilet formerly located near the kitchen of the institution.
- (3) Repairs to a pressing machine and installation of same in the laundry, changing the heating system of said machine so that it may operate with petroleum instead of with gasoline.
- (4) Miscellaneous repairs to washing machine and its motors.
- (5) Reinstallation of a toilet on the main floor of the building.
- (6) Repairs to various musical instruments and kitchen utensils.
- (7) Installation of apparatus for athletic games on the grounds of Company B, composed of minor children.
- (8) Construction of a dark room for making blue prints of plans.

*Masonry.*—Thirty pupils attended the course in masonry daily during the year, performing the work enumerated below:

- (1) Construction of a kitchen range with four burners in the upper story of the building.
- (2) Stone flagging of embrasures of windows in the students' dining room.
- (3) Repairs with enameled tiles of kitchen sink in the students' dining room.
- (4) Construction of walls and floor pavement in the kiosks of Companies A, B, and C.
- (5) Repairs and extension of drainage of the roof.
- (6) Concrete frames in the kiosk of Company D.
- (7) Construction of a sink in the kitchen.
- (8) Flagging pavement of floor of the kitchen and construction of a large kitchen range of seven burners in the extension of said department.
- (9) Construction of sidewalks and concrete framework in front of the kitchen.
- (10) Construction of two tables, imitation marble, for the kitchen.
- (11) Construction of sewers for drainage in front of the kitchen.
- (12) Raising to a height of 9 feet a 6-foot brick and cement wall located between the kitchen and bathroom.
- (13) Repairs to the building in general.

*Carpentry.*—Thirty pupils attended the caprentry course daily during the year, performing the work enumerated below:

- (1) Construction of three small quarters for the students belonging to Companies A, B, and C.
- (2) Remodeling two wardrobes and repairs to another in the clothes room.
- (3) Construction of two small stepladders for the clothes room and washing room.
- (4) Construction of six washboards and a tray for serving meals in the hospital.
- (5) Construction of two benches for seats for the boys in the dining room of the hospital.
- (6) Construction of a wooden box for the water meter.
- (7) Construction of three high stools for the barber shop.
- (8) Construction of a window for the dormitory of Company B.
- (9) Construction of a copying press for the plumbing shop.
- (10) Construction of two frames for small maps of the Island of Porto Rico.
- (11) Construction of two bookcases for the reading room.
- (12) Construction of three chairs of "laurel savino" for the club at Camp Las Casas.
- (13) Construction of two checkerboards to send to the soldiers at Panama.
- (14) Construction of various kettle covers, mop handles, etc.
- (15) Construction of various objects for private individuals and for exhibition, such as chessboards, nursing chairs, flower-pot stands, cardcases, drawing boards, clothes racks, and cushion for making lace.

*Shoemaking.*—Thirty-four students attended the shoemaking course daily, furnishing shoes to all inmates of the institution. The quantity of shoes made numbered 825 pairs, at a cost of \$1,644.10, or an average of \$1.99 a pair.

Besides this, 11 pairs of shoes were made for exhibition purposes and 4 pairs of sandals for boys with sore feet.

The amount expended for materials for half soles and repairs of 571 pairs of shoes was \$141.89, or an average of 24 cents a pair.

*Tailoring.*—There were made in this shop:

- (1) One hundred and forty-one suits of khaki drill, at a cost of \$137.47, or an average of 90 cents each.
- (2) Seven hundred and thirty-eight suits of blue "Mahon," at a cost of \$740.86, or an average of \$1 each.

The cost given above includes the new full-dress uniform, more expensive than the service one used daily, on account of the wide-shaped trousers and the white cords on the blouses.

- (3) Five hundred and sixty-four suits for work at a total cost of \$323.44, or an average of 35 cents each.
- (4) Twenty suits of unbleached drill for discharged students at a cost of \$28.46, an average of \$1.42 each.
- (5) One hundred and seventy-six pairs of underdrawers at a total cost of \$41.59, an average of 24 cents each.
- (6) One hundred and thirty-two pillowcases at a cost of \$20.53, an average of 15 cents each.
- (7) Twenty-four undershirts at a total cost of \$12.15, an average of 50 cents each.
- (8) Nineteen pajamas at a total cost of \$17.80, an average of 94 cents each.
- (9) Sixty bed sheets at a total cost of \$37.80, an average of 63 cents each.
- (10) Two hundred and seventy-five caps at a total cost of \$62.01, an average of 23 cents each.

#### MANUAL TRAINING—GIRLS' CHARITY SCHOOL.

*Hat making, machine sewing, and drawn-work classes.*—Forty students attended with great progress. In these classes they also learned to make artificial flowers of cloth and of paper.

*Cooking classes.*—Ninety girls from the sixth to eighth grades, inclusive, attended, the work being essentially practical.

*Embroidery, drawn work, straw work, laces, marking, crochet, and hand sewing.*—The work performed at these shops is remarkable, judging by the articles produced in same and which are sold at good prices, showing that they are highly appreciated by the public.

The attendance of girls at said shops is as follows:

Embroidery shop.....	35
Straw-work, lace-work, and drawn-work shops.....	50
Crochet, marking work, and mending clothes shops.....	40
Total.....	175

Articles made in these shops and the prices at which they were sold and of those remaining on hand:

One tablecloth, embroidered.....	\$200. 00
One round tablecloth.....	100. 00
One tablecloth and table napkins.....	100. 00
10 table centerpieces, at \$20 each.....	200. 00
6 small centerpieces, at \$5 each.....	30. 00
30 pieces of clothing, machine sewed.....	60. 00
10 towels.....	20. 00
25 straw baskets, at \$1 each.....	25. 00
15 pieces underwear.....	30. 00
<b>Total.....</b>	<b>765. 00</b>

Proceeds of the work done and articles sold and for concerts given by the boys' band:

From the Boys' Charity School.....	\$922. 84
From the Girls' Charity School.....	693. 90
<b>Total.....</b>	<b>1,616. 74</b>

Both institutions also have a teacher of drawing and painting, and another one of physical culture, which work is giving very good results; the first cultivating artistic tastes among the students, training them in said arts; and the second, carefully watching eugenic development of the children under official charity, endeavoring to change and improve their weak and feeble constitutions caused by the surrounding conditions of orphanage and misery prior to entering the school.

#### COOPERATION RENDERED BY THE INMATES OF THE CHARITY SCHOOLS IN CONNECTION WITH THE CONFLICT CREATED BY THE EUROPEAN WAR.

The charity schools at Santurce have followed and carefully implanted the rules promulgated by the Food Commission for the better use of food as a measure to increase the food supplies for the allied forces at the front, having established the breadless and meatless diet days designated by the said commission.

Both schools contributed with enthusiasm to increase the funds of the American Red Cross by the following amounts, which were sent to the well-deserving institution through the commissioner of education:

The Boys' Charity School.....	\$104. 00
The Girls' Charity School.....	47. 60
<b>Total.....</b>	<b>151. 60</b>

Both of these amounts were collected at evening entertainments held in each of the institutions; in that held by the Boys' Charity School there took place a temperance composition in which students of the public schools took part, the prize being won by student Manuel Huerta, of the charity school, who was awarded a gold medal, an honor which belongs to the institution, which sees in this boy a promise of success on account of his talent, good conduct, and love of his studies.

The employees of the schools also contributed to the Red Cross funds one day's pay each.

The finest proof of the cooperation of the charity schools in the undertakings of our country in the war is the fact that more than 75 of the boys from the school are in the Army on the island, there also being two or three of them, already soldiers, fighting in the trenches of noble and free France.

#### ADMISSION OF CHILDREN IN THE SCHOOLS.

We will finish this report with the following statement showing the number of children of both sexes at present in the schools from the different towns of the island, indicating also the number which each town is equitably and justly entitled to and the total enrollments that may be admitted as soon as the work of enlarging both of these schools is completed.

From the said statement it will be seen that some of the towns have been enjoying privileges to which they are not entitled, to the detriment of other municipalities of the island.

In view of this condition of affairs, this department purposes to gradually reduce the number of inmates from those municipalities unjustly benefited until all of the municipalities have the representation to which they are entitled in the schools. At the same time all initiative or personal influence in favor of certain children will be decidedly ignored, establishing for each municipality, after due investigation, a waiting list for admission in turn only of those children who are really in need of official protection on account of their poverty.



## REPORT OF VISITING PHYSICIAN.

## FOR THE BOYS' AND GIRLS' CHARITY SCHOOLS.

During the past fiscal year 290 inmates have been treated in the hospital of the boys' charity school. Many of them remained in bed for over a month, or at least parts of two months which, according to the monthly statistics, shows 390 boys treated, or an average of 32 patients per month.

Not one death has occurred during the year; the diseases treated having been the following:

INFECTIOUS DISEASES.		DISEASES OF THE GENITO-URINARY ORGANS.	
Dysentery.....	2	Catarrhal nephritis.....	1
Grip.....	8	Orchitis.....	2
Malaria.....	15	Total.....	3
Parotiditis.....	1	TRAUMATISM OF THE LOCOMOTIVE SYSTEM.	
Acute rheumatism.....	2	Luxation.....	1
Measles.....	2	Fractures.....	5
Whooping cough.....	9	Total.....	6
Chicken pox.....	51	DISEASES OF THE SKIN AND CELLULAR TISSUE.	
Total.....	90	Inflammatory abscess.....	12
DISEASES OF THE NERVOUS SYSTEM.		Eczema.....	8
Convulsions.....	1	Ringworm.....	4
Epilepsy.....	1	Total.....	24
Total.....	2	TRAUMATISM.	
DISEASES OF THE RESPIRATORY SYSTEM.		Bruises.....	9
Asthma.....	4	Wounds.....	6
Catarrhal pharyngitis.....	1	Total.....	15
Diseases of the larynx.....	5	SPECIAL DISEASES OF THE SENSES.	
Bronchitis.....	11	Catarrhal conjunctivitis.....	1
Broncho-pneumonia.....	1	Trachoma.....	10
Pleurodynia.....	1	Acute rinitis.....	1
Total.....	23	Otitis.....	2
DISEASES OF THE DIGESTIVE SYSTEM.		Total.....	14
Alveolar abscess.....	4	DISEASES OF THE CIRCULATORY SYSTEM.	
Contracture.....	1	Linfangitis.....	17
Indigestion.....	51	INTESTINAL PARASITES.	
Gastritis.....	8	Uncinaria.....	20
Febrile gastric catarrh.....	9		
Hepatic congestion.....	1		
Colecistitis (acute).....	1		
Gastroenteritis.....	1		
Total.....	76		

There has been established since May, 1918, a consultorio for all diseases not requiring treatment in the hospital, and 155 boys have attended it during the month of May and 148 during June.

There have been examined for admission to the school 44 boys.

Assisted by the teacher of athletic exercises, Mr. Holtin, 104 boys were examined to make a card record comprising the physical examination relative to the osseous muscular system, and medical examination relative to the general soundness of all the organs and functions, with special recommendations in regard to the physical exercises that would develop said boys in order to increase organic development gradually. Of these cards concerning physical examination, 104 were filled, and 82 of medical examination. Mr. Holtin's departure and the opinion of the writer about the necessary modification of these cards has caused the suspension of the work until it can be reorganized.

*Girl's Charity School.*—In this school 102 girls have been treated in the infirmary, under the following diagnoses:

Ulcers.....	2	Bronchitis.....	2
Gastric fever.....	2	Facial paralysis.....	1
Catarrhal fever.....	5	Chicken pox.....	35
Enteritis.....	1	Abscess.....	1
Ringworm.....	2	Asthma.....	1
Endocarditis.....	1	Eczema.....	1
Burns.....	1	Tuberculosis.....	1
Gastric catarrh.....	1	Uncinaria.....	42
Malaria.....	1	Total.....	102
Eritema.....	2		

About thirty girls were vaccinated and all those not requiring admission to the hospital were treated in the consultorio.

Statement showing amounts expended by the department of health from July 1, 1917, to Dec. 31, 1917, and the balances June 30, 1918.

[Fiscal year 1917-18.]

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>OFFICE OF THE COMMISSIONER.<sup>1</sup></b>					
Personnel.....	\$69,040.00	.....	.....	.....	.....
Repaid to the treasury as per section 8, act No. 71, Dec. 6, 1917.....	35,783.79	.....	.....	.....	.....
	33,256.21	\$33,256.21	.....	\$33,256.21	.....
Automobile supplies and repairs.....	1,000.00	748.12	\$29.48	772.60	\$227.40
Chemicals and disinfectants.....	500.00	151.07	.....	151.07	348.93
Lighting and water.....	200.00	124.40	.....	124.40	75.60
Postage and freight.....	1,500.00	701.27	.....	701.27	798.73
Vaccine virus and serum.....	550.00	99.90	75.00	174.90	375.10
Stationery and printing.....	1,500.00	1,033.35	.....	1,033.35	466.65
Unexpended property.....	850.00	624.41	224.36	848.77	1.23
Supplies and equipment, bacteriological laboratory.....	1,000.00	883.87	.....	883.87	116.13
Supplies and equipment, chemical laboratory.....	1,000.00	602.96	304.13	907.09	92.91
Telephone and telegraph service.....	960.00	329.06	.....	329.06	630.94
Traveling expenses.....	2,000.00	1,369.29	.....	1,369.29	630.71
Incidentals: Miscellaneous supplies, toilet articles, repairs to furniture and typewriters, and for other minor office expenses.....	500.00	392.48	39.84	432.32	67.68
<b>Total.....</b>	<b>44,816.21</b>	<b>40,311.39</b>	<b>672.81</b>	<b>40,984.20</b>	<b>3,832.01</b>
<b>LEPER COLONY.<sup>2</sup></b>					
Personnel.....	3,366.00	.....	.....	.....	.....
Repaid to the treasury.....	1,693.67	.....	.....	.....	.....
	1,672.33	1,672.33	.....	1,672.33	.....
Maintenance of 40 patients and 13 employees.....	5,808.50	4,448.14	15.65	4,463.79	1,339.71
Clothing and bedding.....	2,000.00	1,386.76	31.12	1,417.88	582.12
Unexpended property.....	500.00	268.68	.....	268.68	231.32
Incidentals: Medicines, lighting, toilet articles, cigars and cigarettes, fuel, ice, laundry supplies, repairs to furniture, and for other miscellaneous expenses.....	2,000.00	1,269.34	.....	1,269.34	730.66
<b>Total.....</b>	<b>11,975.83</b>	<b>9,045.25</b>	<b>46.77</b>	<b>9,092.02</b>	<b>2,883.81</b>
<b>QUARANTINE HOSPITAL.<sup>3</sup></b>					
Personnel.....	1,452.00	.....	.....	.....	.....
Repaid to the treasury.....	742.40	.....	.....	.....	.....
	709.60	709.60	.....	709.60	.....
Maintenance of patients and employees: Appropriated..... \$700 Transferred to incidentals..... 100	600.00	505.73	11.70	517.42	82.58
Lighting and water.....	200.00	103.30	.....	103.30	96.70
Incidentals: Fuel, ice, medicines, clothing, and bedding, and other minor expenses.....	200.00	192.17	.....	192.17	7.83
<b>Total.....</b>	<b>1,709.60</b>	<b>1,510.79</b>	<b>11.70</b>	<b>1,522.49</b>	<b>187.11</b>

<sup>1</sup> By act approved Dec. 6, 1917, act No. 54, approved Apr. 12, 1917, making appropriations for the necessary expenses of carrying on the insular government for the fiscal year 1917-18, was amended inasmuch as relates to the department of health: *Provided*, That the amounts included in said amended budget shall be applicable only to the first six months of the said fiscal year: that is, Jan. 1, 1917, to Dec. 31, 1917; and that all obligations incurred by the department up to and including Dec. 31, 1917, shall have been satisfied, all balances of the items of the budget shall be repaid to the treasury of Porto Rico. Accordingly on Feb. 9, 1918, \$101,112.67 was repaid to the treasury, being the balances of the appropriations for personnel; the balances of the other appropriations remaining pending until the term of two years shall have elapsed for the liquidation of the accounts of the insular government; for this reason the transfers of balances for salaries only are included in this statement.

<sup>2</sup> Expenses for the maintenance of the leper colony deserves especial explanation, as of the amount of \$5,808.50 appropriated for subsistence for 40 patients and 13 employees during the 12 months of the fiscal year, at the rate of 30 cents per diem each, \$4,463.79 was expended during the six months included from July to December 1917; therefore, should the same budget for 1917-18 had continued in effect, the result would have been a deficit of over \$3,000 in said appropriation. Each inmate has cost 45.77 cents—that is, 15.77 cents more than the amount appropriated.

It must be taken into account that the very small appropriations for this hospital are caused by the fact that 90 per cent of the patients treated there have transmissible diseases, and that all expenses upon the treatment of such patients are properly chargeable to the emergency fund for control and suppression of epidemics.

Statement showing amounts expended by the department of health from July 1, 1917, to Dec. 31, 1917, and the balances June 30, 1918—Continued.

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>FIELD FORCE.<sup>1</sup></b>					
Personnel.....	\$75,670.00				
Repaid to the treasury.....	39,374.67				
	36,295.33	\$36,295.33		\$36,295.33	
Killing and burial of animals.....	150.00	2.12		2.12	\$147.88
Lighting and water.....	400.00	218.29		218.29	181.71
Postage and freight.....	750.00	298.76		298.76	451.24
Rent.....	\$1,780				
Transferred from insane asylum... 1,067					
	2,847.00	1,461.81		1,461.81	1,385.19
Telephone and telegraph service.....	200.00	90.12		90.12	109.88
Traveling expenses.....	6,000.00	1,781.17		1,781.17	4,218.83
Incidentals: Care of animals, stables, and disinfection work; forage, shoeing, and medicines for animals; purchase of equipment, repair of equipment; coaches, wagons, harness, disinfecting apparatus, etc.....	12,000.00	7,838.66	\$600.00	8,438.66	3,561.34
Total.....	58,642.33	47,986.26	600.00	48,586.26	10,056.07
<b>SUPPRESSION OF ANEMIA.<sup>2</sup></b>					
Personnel.....	8,000.00	2,280.00			
Traveling expenses.....		13.00			
Rent of houses for offices.....		94.65			
Postage and freight on medicines and supplies.....		87.43			
Incidentals: Stationery and minor office expenses.....		765.06			
Maintenance of animals.....		38.00			
Labor.....		34.50			
Purchase of two horses.....		290.00			
Medicines.....		3,237.28			
Saddles and other supplies.....		166.05			
Total.....	8,000.00	7,005.97		7,005.97	994.03
<b>MOSQUITO EXTERMINATION.<sup>3</sup></b>					
Personnel.....	15,165.75				
Repaid for labor furnished in private works.....	29.74				
	15,195.49				
Repaid to the treasury, as per act No. 71, Dec. 6, 1917.....	8,785.84				
	6,785.84	6,785.84		6,785.84	
Oil, lumber, cement, and other incidental expenses.....	\$8,834.25				
Receipts from sale of empty barrels.....	153.42				
	8,987.67				
Transferred from traveling expenses.....	400.00				
	9,387.67	9,329.41	58.26	9,387.67	
Traveling expenses.....	1,000.00				
Transferred to incidentals.....	400.00				
	600.00	80.45	119.40	199.85	400.15
Total.....	16,773.51	16,195.70	177.66	16,373.36	400.15

<sup>1</sup> In the amendment made to this budget by act approved Dec. 6, 1917, at the request of this department, all appropriations for materials and supplies in the field force were abolished and the amounts were included under the same subheads in the office of the commissioner. This amendment, apparently insignificant at first sight, has saved a great deal of time and work not only to this department but to other departments of the government as well, decreasing considerably the number of vouchers and duplication of items in the budget, which duplication caused confusion and errors in the accounting, and with the opening of sanitation offices in every municipality the amendment is still more advantageous.

<sup>2</sup> Although this appropriation is not detailed in the budget, the department has thought it convenient to classify the expenses as shown in the preceding statement, so that the expenditure of funds may be better appreciated.

<sup>3</sup> The present price of the material used in this work should be taken into account, for the price of oil, for instance, since 1911 to the beginning of the war, with very little variation, was 54 cents a gallon; but 500 barrels purchased in July, 1917, cost 15 cents per gallon, and the last 600 barrels bought in December, 1917, cost at the rate of 194 cents a gallon. Therefore, 1,000 gallons of oil at present cost about \$200 against \$57.50 before the above-mentioned year 1917.

*Statement showing amounts expended by the department of health from July 1, 1917, to Dec. 31, 1917, and the balances June 30, 1918—Continued.*

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>MOSQUITO EXTERMINATION—continued.</b>					
Care of tuberculosis patients.....	\$25,000.00				
Amount received for the care of sailors of the United States.....	450.00				
	25,450.00				
Personnel.....		\$1,646.83		\$1,646.83	
Maintenance of patients and employees.		2,714.89	\$132.42	2,847.31	
Clothing and bedding.....		625.16		625.16	
Lighting and water.....		111.82		111.82	
Medicines and supplies.....		572.28		572.28	
Fuel.....		306.26		306.26	
Unexpended property.....		61.73	7,280.25	7,341.98	
Transportation of patients.....		16.42		16.42	
Incidentals: Laundry, ice, kitchen and dining utensils and other minor expenses.....		674.23		674.23	
Care and maintenance of patients in the sanatorium of the anti-Tuberculosis League of Ponce.....		3,131.00		31,131.00	
<b>Total.....</b>	<b>25,450.00</b>	<b>9,880.62</b>	<b>7,412.67</b>	<b>17,273.29</b>	<b>\$8,176.71</b>
<b>BLIND ASYLUM.</b>					
Personnel.....	8,268.00				
Repaid to the treasury.....	4,134.00				
	4,134.00	4,134.00		4,134.00	
Subsistence of patients and employees.....	\$10,312.00				
Transferred to unexpended property.....	100.00				
	10,212.00	5,087.29	98.80	5,186.09	5,055.91
Clothing and bedding.....	900.00	590.87	7.20	598.07	301.93
Unexpended property.....	100.00				
Transferred.....	260.00				
	360.00	271.07	12.00	283.07	76.93
Medicines and supplies.....	600.00	337.06		337.06	262.94
Fuel.....	500.00	393.54		393.54	106.46
Incidentals.....	800.00				
Transferred.....	100.00				
	700.00	637.11		637.11	62.89
Lighting and water.....	500.00				
Transferred.....	100.00				
	400.00	169.16		169.16	230.84
Transportation of patients.....	500.00	320.74		320.74	179.26
<b>Total.....</b>	<b>18,506.00</b>	<b>11,910.84</b>	<b>118.00</b>	<b>12,028.84</b>	<b>6,277.16</b>
<b>INSANE ASYLUM.<sup>1</sup></b>					
Personnel.....	21,424.00				
Repaid to the treasury.....	10,974.49				
	10,449.51	10,449.51		10,449.51	
Subsistence of patients and employees.....	38,763.00				
Receipts from pay-patients.....	3,427.75				
	42,190.75				
Transferred to incidentals.....	500.00				
	41,690.75				
Transferred to blind asylum...	160.00				
	41,530.75				
Transferred to rent of houses for offices.....	1,067.00				
	40,463.75	27,382.18	47.37	27,429.55	13,034.20
Clothing and bedding.....	3,400.00				
Receipts from pay-patients.....	3,427.75				
	6,827.75				

<sup>1</sup> The amount of \$7,280.25 shown as being pending of payment, is for beds and other hospital supplies ordered from the United States and is subject to a slight change.

<sup>2</sup> The average number of patients in the insane asylum during the six months from July to December, 1917, inclusive, was of 475, which added to 56 employees gives a total of 531 people per diem—that is, 97,704 in the 184 days of the semester, which at the rate of 20 cents each would amount to \$19,540.80; but as \$27,429.55 was expended for subsistence of said 531 during the 184 days, the cost for subsistence of each person is approximately 28 cents instead of 20 cents appropriated in the budget.

Statement showing amounts expended by the department of health from July 1, 1917, to Dec. 31, 1917, and the balances June 30, 1918—Continued.

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>INSANE ASYLUM—continued.</b>					
Transferred to unexpendable property.....	\$100.00				
Fuel.....	68,727.75	\$3,068.66		\$3,068.66	\$3,609.09
Incidentals: Toilet articles, kitchen and dining utensils, laundry supplies, repairs, ice, and other minor expenses.....	1,000.00	741.31		741.31	258.69
Transferred from subsistence.....	1,500.00				
	500.00				
Lighting and water.....	2,000.00	1,501.48		1,501.48	498.52
Medicines and supplies.....	2,000.00	1,112.93		1,112.93	887.07
Transportation of patients.....	1,000.00	643.09	\$8.20	651.29	348.71
Unexpendable property.....	2,000.00	417.70		417.70	1,582.30
Transferred from clothing and bedding.....	1,100.00				
	100.00				
	1,200.00	1,108.32		1,108.32	91.68
Total.....	66,841.01	46,415.18	55.57	46,470.75	20,370.26
Education and maintenance of indigent deaf and dumb children.....	1,200.00	600.00		600.00	600.00
<b>RECAPITULATION.</b>					
Amount of budget for the fiscal year 1917-18.....	347,338.50				
Balance of amounts for salaries Jan. 1, 1918, and repaid to the insular treasury as per act approved Dec. 6, 1917.....	101,112.67				
	246,225.83				
Miscellaneous repayments.....	7,488.66				
Actual total of budget.....	253,714.49	190,842.00	9,095.18	199,937.18	53,777.31

Statement showing amounts expended by the department of health from January 1, 1918, to June 30, 1918, and the balances July 1, 1918.

[Fiscal year, 1918.]

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balances.
<b>OFFICE OF THE COMMISSIONER.</b>					
Personnel.....	\$37,500.00				
Transferred from the department of education.....	2,148.33				
	39,648.33				
Transferred to:					
Stationery and printing.....	\$800.00				
Incidentals.....	200.00				
Incidentals	1,000.00				
	38,648.33	\$37,162.50		\$37,162.50	\$1,485.83
<b>GENERAL EXPENSES.</b>					
Chemicals and disinfectants.....	250.00	6.60		6.60	423.40
Killing and burial of animals.....	75.00	4.50		4.50	70.50
Lighting and water.....	400.00	379.83		379.83	20.17
Vaccine virus and serums.....	500.00	58.26		58.26	441.74
Labor.....	\$2,000.00				
Transferred from suppression of measles.....	4,000.00				
	6,000.00	3,104.35		3,104.35	2,895.65
Postage and freight.....	1,250.00	721.30		721.30	528.70
Supplies and equipment, bacteriological laboratory.....	1,250.00	691.74	\$244.70	936.44	313.56

Statement showing amounts expended by the department of health from January 1, 1918 to June 30, 1918, and the balances July 1, 1918—Continued.

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balances.
<b>GENERAL EXPENSES—continued.</b>					
Supplies and equipment, chemical laboratory.....	\$1,000.00	\$426.76	\$384.58	\$811.34	\$188.66
Stationery, printing, and medical bulletin.....	\$750.00				
Transferred from salaries.....	800.00				
	1,550.00	1,087.81	462.19	1,550.00	.....
Rent of houses for offices.....	3,500.00	3,180.65	8.00	3,188.65	311.35
Telephone and telegraph service.....	600.00	366.75	45.00	411.75	188.25
Purchase of automobiles and one truck.....	4,000.00	3,925.00	.....	3,925.00	75.00
Unexpended property.....	\$250.00				
Transferred from field force.....	300.00				
	550.00	398.67	16.79	415.46	134.54
Traveling expenses, supplies, and repairs of automobiles and allowances made for mileage for automobiles and motorcycles, hire of horses, coaches, and automobiles, and for care and maintenance of animals of the department.....	6,000.00	5,676.08	99.82	5,775.90	224.10
Incidentals: Supplies, toilet articles, repairs to furniture and typewriters, minor expenses, etc.....	\$500.00				
Transferred from personnel.....	200.00				
Transferred from suppression of measles.....	4,000.00				
	4,700.00	2,025.36	54.17	2,079.53	2,620.47
<b>Total.....</b>	<b>70,273.33</b>	<b>59,216.16</b>	<b>1,315.25</b>	<b>60,531.41</b>	<b>9,741.92</b>
<b>FIELD FORCE.</b>					
Transferred from office of the commissioner.....	\$43,260.00				
Unexpended property.....	300.00				
<b>Total.....</b>	<b>42,960.00</b>	<b>40,860.07</b>		<b>40,860.07</b>	<b>2,099.93</b>
<b>LEPER COLONY.</b>					
Personnel.....	2,566.00	2,561.67	.....	2,561.67	3.33
Maintenance of 40 patients and 16 employees, at 30 cents per day each.....	\$3,066.00				
Transferred from suppression of measles.....	500.00				
	3,566.00	2,844.32	566.54	3,410.86	155.14
Clothing and bedding.....	1,000.00				
Transferred from suppression of measles.....	1,200.00				
	2,200.00	1,780.88	163.28	1,944.16	255.84
Unexpended property.....	250.00				
Transferred from suppression of measles.....	100.00				
	350.00	344.10	5.90	350.00	.....
Incidentals: Medicines, lighting, toilet articles, cigars and cigarettes, fuel, ice, laundry supplies, repairs to furniture, and other miscellaneous expenses.....	1,000.00	905.33	92.00	997.33	2.67
<b>Total.....</b>	<b>9,681.00</b>	<b>8,436.30</b>	<b>827.72</b>	<b>9,264.02</b>	<b>416.98</b>
<b>QUARANTINE HOSPITAL.</b>					
Personnel.....	\$1,116.00				
Transferred to lighting and water.....	14.30				
	1,101.70	1,086.71	.....	1,086.71	14.99
Maintenance of patients and employees.....	500.00				
Transferred to incidentals.....	150.00				
Received of a pay patient.....	2.00				
	352.00	100.89	2.68	113.57	238.43
Lighting and water.....	150.00				
Transferred from personnel.....	14.30				
	164.30	164.30	.....	164.30	.....

*Statement showing amounts expended by the department of health from January 1, 1918, to June 30, 1918, and the balances July 1, 1918—Continued.*

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balances.
<b>QUARANTINE HOSPITAL—continued.</b>					
Incidentals: Minor expenses, laundry supplies, ice, kitchen utensils, fuel, etc.....	\$150.00				
Transferred.....	150.00				
Received of a pay patient.....	2.00				
	\$302.00	\$290.40		\$290.40	\$11.60
Repairs of present buildings and constructions of sanitary quarters for the proper segregation of transmissible diseases.....	2,250.00	1,592.22	\$12.46	1,604.68	645.32
<b>Total.....</b>	<b>4,170.00</b>	<b>3,234.52</b>	<b>15.14</b>	<b>3,259.66</b>	<b>910.34</b>
<b>Mosquito extermination and control and suppression of malaria.....</b>	<b>12,500.00</b>				
Receipts from sale of materials.....	136.70				
	12,636.70				
Personnel.....		3,627.01		3,627.01	
Labor.....		1,538.09		1,538.09	
Medicines.....		295.34	3,000.00	3,295.34	
Traveling expenses.....		23.45		23.45	
Transportation.....		40.52		40.52	
Lighting and water.....		12.30		12.30	
Unexpendable property.....		42.30		42.30	
Subsistence.....		923.71		923.71	
Clothing and bedding.....			613.00	613.00	
Material, mosquito extermination.....		1,168.99	440.00	1,608.99	
Incidentals: Laundry supplies and other minor expenses.....		181.51		181.51	
<b>Total.....</b>	<b>12,636.70</b>	<b>7,853.22</b>	<b>4,053.00</b>	<b>11,906.22</b>	<b>730.48</b>
<b>Suppression of anemia.....</b>	<b>10,000.00</b>				
Personnel.....		840.00		840.00	
Labor.....		428.97		428.97	
Traveling expenses.....		167.55		167.55	
Stationery.....			205.00	205.00	
Rent of houses.....		60.00		60.00	
Medicines.....		4.80	1,000.00	1,004.80	
Transportation of supplies.....		58.97		58.97	
Building material.....			3,000.00	3,000.00	
Incidentals, minor expenses.....		232.25	19.98	252.21	
To pay the Utuado Sugar Co. for 5 cuerdas of land and a house to be used as an anemia hospital.....			2,500.00	2,500.00	
<b>Total.....</b>	<b>10,000.00</b>	<b>1,792.54</b>	<b>6,724.96</b>	<b>8,517.50</b>	<b>1,482.50</b>
<b>Education and maintenance of deaf and dumb children.....</b>	<b>600.00</b>	<b>600.00</b>		<b>600.00</b>	
<b>Care of tuberculosis patients<sup>1</sup>.....</b>	<b>20,000.00</b>				
Receipts for the care of patients of the United States Public Health Service.....	426.00				
	20,426.00				
Repaid to the United States Public Health Service.....	164.00				
	20,262.00				
Personnel.....		1,880.66		1,880.66	
Labor.....		1,430.18		1,430.18	
Building materials.....			5,271.80	5,271.80	
Subsistence of patients and employees.....		3,264.25	649.15	3,913.40	
Clothing and bedding.....		21.00	225.00	246.00	
Transportation of patients.....		36.24		36.24	
Unexpendable property.....		17.47		17.47	
Fuel.....		360.05		360.05	
Medicines and supplies.....		89.00		89.00	
Incidentals: Kitchen and dining utensils, toilet articles, ice, and other minor expenses.....		1,681.27	12.00	1,693.27	
Care of tuberculosis patients at Ponce.....		3,260.00		3,260.00	
<b>Total.....</b>	<b>20,262.00</b>	<b>12,407.82</b>	<b>6,157.95</b>	<b>18,565.77</b>	<b>1,696.23</b>

<sup>1</sup> The Anti-Tuberculosis League of Ponce is paid monthly for the care, maintenance, and treatment of tuberculosis patients in the sanatorium at the rate of \$1 daily per patient. During the six months included from January to June, 1918, 18 patients have been cared for daily—that is, a monthly average of 543 patients—as shown in the list rendered by the president of said league, approved by the health officer at Ponce, and which totals are as follows: January, 561; February, 483; March, 573; April, 550; and June, 507; a total of 3,260 patients.

Statement showing amounts expended by the department of health from January 1, 1918, to June 30, 1918, and the balances July 1, 1918—Continued.

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balances.
<b>INSANE ASYLUM.</b>					
Personnel.....	\$13,752.00	\$12,843.66	.....	\$12,843.66	\$908.34
Subsistence for 425 patients and not exceeding 64 employees, at 20 cents per day each.....	\$17,848.50				
Received for pay patients.....	3,276.50				
	21,125.00				
Transferred to different subheads.....	1,000.00				
	20,125.00	14,211.33	\$3,183.43	17,394.76	2,730.24
Clothing and bedding.....	1,700.00				
Received for pay patients.....	3,276.50				
	4,976.50	1,051.45	2,987.70	4,039.15	937.35
Fuel.....	500.00				
Transferred from subsistence...	400.00				
	900.00	856.98	43.00	899.98	.02
Incidentals.....	720.00				
Transferred from subsistence...	300.00				
	1,050.00	951.98	607.40	1,559.38	Deficit, 61.85
Lighting and water.....	1,000.00	930.65	7.50	938.15	
Medicines and supplies.....	\$500.00				
Transferred from subsistence.....	300.00				
	800.00	730.69	.....	730.69	69.31
Transportation of patients.....	1,000.00	196.26	118.60	314.86	685.14
Unexpendable property.....	550.00	127.72	1,889.82	2,017.54	Deficit.
Total.....	44,153.50	31,900.72	8,837.45	40,738.17	5,392.25
Deduct from "Balance" the deficits resulting in the subheads "Incidentals" and "Unexpendable property," that is, \$509.38 in the first subhead and \$1,467.54 in the latter, making a total.....					1,976.92
Total.....	44,153.50	31,900.72	8,837.45	40,738.17	3,415.33
<b>BLIND ASYLUM.</b>					
Personnel.....	5,004.00	5,000.00	.....	5,000.00	4.00
Subsistence for 108 patients and 33 employees at 20 cents per day each.....	\$5,146.50				
Transferred to other subheads..	525.00				
	4,621.50	2,573.55	963.69	3,537.24	1,084.26
Clothing and bedding.....	450.00				
Transferred from subsistence...	200.00				
	650.00	315.87	9.09	324.96	325.04
Unexpendable property.....	200.00	174.23	.....	174.23	25.77
Medicines and supplies.....	300.00				
Transferred from subsistence.....	50.00				
	350.00	305.86	.....	305.86	44.14
Fuel.....	500.00	353.36	.....	353.36	146.64
Incidentals.....	300.00				
Transferred from subsistence.....	225.00				
	525.00	432.18	49.30	481.48	43.52
Lighting and water.....	250.00	153.11	.....	153.11	96.89
Transportation of patients.....	250.00				
Transferred from subsistence.....	50.00				
	300.00	251.26	.....	251.26	48.74
Total.....	12,400.50	9,559.42	1,022.08	10,581.50	1,819.00
<b>RECAPITULATION.</b>					
Amount of budget for the year 1918.....	208,233.00				
Total received, repaid, and transferred as indicated.....	18,904.03				
Actual amount of budget.....	227,137.03	175,866.77	28,963.55	204,824.32	22,312.71



*Recapitulation of the two budgets.*

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>GRAND TOTAL OF THE TWO BUDGETS IN FORCE DURING THE FISCAL YEAR 1917-18, WITH A RECAPITULATION OF THE PARTS PERTAINING TO EACH BRANCH OF THE DEPARTMENT.</b>					
Office of the commissioner:					
Appropriated for office of the commissioner proper.....	\$44,816.21	\$40,311.39	\$672.81	\$40,984.20	\$3,832.01
Appropriated for supplies, materials, field force.....	22,347.00	11,690.93	600.00	12,290.93	10,056.07
Total from July to December, 1917.....	67,163.21	52,002.32	1,272.81	53,275.13	13,888.08
Total from January to June, 1918.....	70,273.33	59,216.16	1,315.25	60,531.41	9,741.92
Field force:					
July-December, 1917.....	36,295.33	36,295.33		36,295.33	
January-June, 1918.....	42,960.00	40,860.07		40,860.07	2,099.93
Leper colony:					
July-December, 1917.....	11,975.83	9,045.25	46.77	9,092.02	2,883.81
January-June, 1918.....	9,681.00	8,436.30	827.72	9,264.02	416.98
Quarantine hospital:					
July-December, 1917.....	1,709.60	1,510.79	11.70	1,522.49	187.11
January-June, 1918.....	4,170.00	3,234.52	25.14	3,259.66	910.34
Mosquito extermination and control and suppression of malaria:					
July-December, 1917.....	16,773.51	16,195.70	177.66	16,373.36	400.15
January-June, 1918.....	12,636.70	7,853.22	4,063.00	11,906.22	730.48
Suppression of anemia:					
July-December, 1917.....	8,000.00	7,005.97		7,005.97	994.03
January-June, 1918.....	10,000.00	1,792.54	6,724.96	8,517.50	1,482.50
Care of tuberculosis patients:					
July-December, 1917.....	25,450.00	9,680.62	7,412.67	17,273.29	8,176.71
January-June, 1918.....	20,262.00	12,407.82	6,157.95	18,565.77	1,696.23
Insane asylum:					
July-December, 1917.....	66,841.01	46,415.18	55.57	46,470.75	20,370.26
January-June, 1918.....	44,153.50	31,900.72	8,837.45	40,738.17	3,415.33
Blind asylum:					
July-December, 1917.....	18,306.00	11,910.84	118.00	12,028.84	6,277.16
January-June, 1918.....	12,400.50	9,559.42	1,022.08	10,581.50	1,819.00
Education and maintenance of indigent deaf and dumb children:					
July-December, 1917.....	1,200.00	600.00		600.00	600.00
January-June, 1918.....	600.00	600.00		600.00	600.00
Grand total.....	480,851.52	366,702.73	38,058.73	404,761.50	76,090.02
<b>DIVISION OF GRAND TOTAL.</b>					
Semester from July to December, 1917.....	253,714.49	190,842.00	9,095.18	199,937.18	53,777.31
Semester from January to June, 1918.....	227,137.03	175,860.77	28,963.55	204,824.32	22,312.71
	480,851.52	366,702.77	38,058.73	404,761.50	76,090.02
<b>SPECIAL APPROPRIATIONS.</b>					
Rat extermination, balance from 1916-17.....	617.47				
Expended from July 1 to Dec. 31, 1917:					
Labor.....		366.00			
Materials.....		52.48		418.48	198.99
Balance on Jan. 1, 1918.....	198.99				
Transferred from emergency fund for control and suppression of epidemics, trust fund.....	300.00				
	498.99				
Expended from Jan. 1 to June 30, 1918:					
Labor.....		332.00		332.00	
Materials.....		17.04	18.25	35.29	
Total.....	498.99	349.04	18.25	367.29	131.70
<b>SUPPRESSION OF TRACHOMA.</b>					
Balance from 1916-17.....	1,043.08				
Salaries paid from July 1 to Dec. 31, 1917.....		300.00		300.00	743.08
Transferred to emergency fund for control and suppression of epidemics, trust fund, to close this account.....					743.08

## Recapitulation of the two budgets—Continued.

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>CONTROL AND SUPPRESSION.</b>					
Balance from 1916-17 .....	\$30,545.59				
From July 1 to Dec. 31, 1917, expended for the hospital established at Barceloneta Oct. 24, 1917, for the treatment of malarial patients, as per details following:					
Salaries.....		\$600.00			
Carpenter's work.....		363.09			
Medicines.....		355.44			
Carpenter's expenses.....		21.00			
Freight on materials, etc.....		14.73			
Incidentals.....		38.71			
Unexpendable property.....		16.50			
Stationery.....		49.35			
Electric installations.....		36.55			
Building materials.....		361.46			
Subsistence of patients and employees.....		812.33			
Total for Barceloneta.....		2,668.46		\$2,668.46	
Expended for other diseases:					
Vaccination.....		136.03			
Salaries.....		290.00			
Labor.....		27.00			
Transportation of patients.....		86.61			
Unexpendable property.....		34.95			
Stationery.....		70.42			
Medicines.....		719.94			
Incidentals.....		342.17		1,707.12	
Total.....	30,545.59			4,375.58	\$26,170.01
Balance Jan. 1, 1918.....	26,170.01				
Receipts from sale of property to Department of the Interior.....	2,015.00				
Total available.....	28,185.01				
Expended from Jan. 1 to June 30, 1918, various diseases:					
Salaries.....		306.00			
Medicines.....		95.79			
Subsistence.....		1,018.35			
Incidentals.....		144.72			
Transportation of patients.....		16.37			
Repair of ambulance.....		102.47			
Traveling expenses.....		57.28			
Vaccine.....		271.41			
Stationery.....		159.50			
Lighting and water.....		9.15			
		2,191.04		2,191.04	
Expended for care of typhoid patients:					
Labor.....		246.00			
Medicines and supplies.....		693.17			
Unexpendable property.....		132.70			
Incidentals.....		208.63	\$400.00		
Clothing and bedding.....		115.00			
Subsistence.....		223.98	900.00		
Lighting and water.....		27.00			
		1,646.48	1,300.00	2,946.48	
Total.....	28,185.01			5,137.52	23,047.49
<b>RECAPITULATION OF THE AMOUNTS EXPENDED FOR "SUPPRESSION OF EPIDEMICS" DURING FISCAL YEAR 1917-18.</b>					
For the malaria hospital at Barceloneta.....	2,668.46	2,668.46			
For various diseases.....		3,898.16			
For typhoid.....		1,646.48	1,300.00		
Balance July 1, 1917.....	30,545.59	8,213.10	1,300.00	9,513.10	
Receipts from sale of property.....	2,015.00				
Total.....	32,560.59	8,213.10	1,300.00	9,513.10	23,047.49

## Recapitulation of the two budgets—Continued.

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>SUPPRESSION OF MEASLES.</b>					
Balance July 1, 1917.....	\$32,872.22				
Received from pay patients.....	12.00				
<b>Total.....</b>	<b>32,884.33</b>				
Expended from July 1 to Dec. 31, 1917:					
Salaries.....		\$2,894.33			
Labor.....		320.40			
Subsistence.....		523.82			
Clothing and bedding.....		754.17			
Incidentals.....		563.28			
Medicines and supplies.....		116.87			
Transportation of patients.....		2.50			
Lighting and water.....		10.30			
House rent.....		35.67			
Traveling expenses.....		355.27			
Freight and cartage.....		355.56			
Unexpended property.....	32,884.22	222.65		\$6,204.82	\$26,679.40
Balance Jan. 1, 1918.....	26,679.40				
<b>TRANSFERS.</b>					
To office of the commissioner to provide funds for the removal of houses in Puerto de Tierra.....	\$3,000				
To the leper colony.....	1,800				
	9,800.00				
Balance.....	16,879.40				
Expended from Jan. 1 to June 30, 1918:					
Salaries.....		4,739.18			
Labor.....		115.84			
Subsistence.....		706.84			
Incidentals.....		16.23			
Medicines and supplies.....		45.17			
Transportation of patients.....		13.87			
Lighting and water.....		8.00			
House rent.....		10.00			
Traveling expenses.....		13.00			
Freight and cartage.....		2.40			
Unexpended property.....		13.00			
	16,879.40	5,684.53		5,684.53	11,194.81
<b>GIRLS' CHARITY SCHOOL.</b>					
(Balance of the department of education.)					
Personnel.....	5,468.35	\$5,373.01		5,373.01	95.34
Subsistence for 250 inmates and 29 employees at 20 cents per day each.....	\$14,232.90				
Transferred to general expenses.....	5,500.00				
General expenses.....	1,351.41				
Transferred from subsistence ..	5,500.00				
	8,732.90	6,709.28	\$1,432.92	8,142.20	590.70
	6,851.41	3,937.67	2,211.52	6,149.19	702.22
<b>Total.....</b>	<b>21,052.66</b>	<b>16,019.96</b>	<b>3,644.44</b>	<b>19,664.40</b>	<b>1,388.26</b>
<b>BOYS' CHARITY SCHOOL.</b>					
(Balance of the department of education.)					
Personnel.....	5,468.35	8,341.16		8,341.16	380.35
Subsistence for 350 inmates and 37 employees and dinner for 12 employees, at 20 cents per day.....	\$18,724.23				
Transferred to general expenses.....	7,000.00				
General expenses.....	6,325.91				
Transferred from subsistence ..	7,000.00				
	11,724.23	7,538.44	3,662.64	11,201.08	523.15
	13,325.91	5,800.43	6,094.28	12,494.71	831.20
<b>Total.....</b>	<b>33,771.65</b>	<b>21,680.03</b>	<b>10,356.92</b>	<b>32,036.95</b>	<b>1,734.70</b>

## Recapitulation of the two budgets—Continued.

Personnel and services.	Amounts appropriated.	Paid.	Pending payment.	Total expended.	Balance.
<b>GIRLS' CHARITY SCHOOL.</b>					
(Balance.)					
Sale of articles .....	\$1,851.69				
Receipts, February to June, 1918 .....	196.00				
Total .....	2,047.69				
Expended up to June 30, 1918. ....		\$624.37		\$624.37	\$1,423.32
<b>BOYS' CHARITY SCHOOL</b>					
(Balance.)					
Fund from sale of articles and work done, for presentation of instruments, etc. ....	2,169.26				
Receipts, February to June, 1918 .....	210.95				
Total .....	2,380.21				
Expended up to June 30, 1918 .....		171.10		171.10	2,209.11
Recreation fund .....	1,145.69				
Receipts, February to June, 1918 .....	210.95				
Total .....	1,356.64				
Expended up to June 30, 1918. ....		26.58		26.58	1,330.06
<b>RESERVE FUND FOR SUPPRESSION OF EPI- DEMICS.</b>					
Balance, 1916-17 .....	477.75				
From municipal courts, July 1, 1917, to May 31, 1918 .....	2,171.75				
Transferred due to closing of trachoma ac- count .....	743.08				
Total .....	3,392.58				
Transferred to rat extermination .....	300.00				
Balance available on June 30, 1918. ....	3,092.58				

## PROPOSED BUDGET FOR THE BIENNIAL 1919-1921.

## FISCAL YEAR 1919-20.

*Salaries, office of the commissioner of health—Commissioner's office proper.*—Commissioner, \$5,000; assistant commissioner, \$3,000; secretary and translator, \$1,800; stenographer, \$1,800; three food and drug inspectors, at \$1,800 per annum each, \$5,400; file clerk, \$1,200; clerk and visiting inspector for the boys' and girls' charity schools, \$2,000; two veterinary inspectors, at \$1,400 per annum each, \$2,800; one assistant veterinary, \$1,200; chauffeur, \$720; two chauffeurs, at \$600 per annum each, \$1,200; clerk, \$480; telephone operator, \$480; two messengers, at \$420 per annum each, \$840; janitor, \$420; in all, \$28,340.

*Insular board of health.*—Secretary, \$2,400; clerk, \$1,000; fees of the board, \$1,500; in all \$4,900.

*Division of property and accounts.*—Chief of division, \$2,400; bookkeeper, \$1,800; clerk, \$1,200; clerk, \$1,200; voucher clerk, \$1,200; clerk, \$1,000; in all, \$8,800.

*Division of sanitary engineering.*—Sanitary engineer, \$2,500; two assistant sanitary engineers, at \$2,000 per annum each, \$4,000; draftsman, \$1,400; two plumbing inspectors, at \$1,300 per annum each, \$2,600; typewriter operator, \$1,200; clerk, \$500; in all \$12,200.

*Bacteriological laboratory.*—Laboratory director, \$2,400; bacteriologist, \$1,800; laboratory assistant, \$900; laboratory assistant, \$600; janitor, \$420; in all, \$6,120.

*Chemical laboratory.*—Laboratory director, \$2,400; chemist, \$1,500; assistant chemist, \$1,100; pharmacist, \$1,200; clerk, \$1,000; janitor, \$420; in all, \$7,620.

*Division of transmissible diseases and statistics.*—Chief of division, \$3,000; assistant chief, \$2,000; pathologist, \$2,000; laboratory assistant, \$1,000; clerk, \$900; clerk, \$900; clerk, \$600; clerk, \$600; messenger, \$420; in all, \$11,420.

Total salaries, office of the commissioner of health, \$79,400.

*General expenses of the department.*—Chemicals and disinfectants, \$500; killing and burial of animals, \$150; lighting and water, \$800; purchase of vaccine virus and serums, \$1,000; labor, \$4,000; postage and freight, \$2,500; supplies and equipment, bacteriological laboratory, \$2,500; supplies and equipment, chemical laboratory, \$2,000; stationery, printing and publication of Medical Bulletin, \$3,000; rent of houses for offices, \$7,000; telephone and telegraph service, \$1,200; traveling expenses, including supplies and repairs of automobiles and allowances to be made to officials of this department for mileage for automobiles and motorcycles and for horses and coaches owned by said officials and used on official duties, and for care and maintenance of animals of the department, \$12,000; unexpendable property, \$1,000; incidentals, miscellaneous supplies, toilet articles, repairs to furniture and typewriters, and other minor office expenses, \$1,000; in all, \$38,650.

Total, office of the commissioner of health, \$118,050.

*Salaries, field force.*—Health officer, \$2,700; two medical inspectors, at \$3,000 per annum each, \$6,000; two health officers, at \$2,400 per annum each, \$4,800; two health officers, at \$2,000 per annum each, \$4,000; four health officers, at \$1,500 per annum each, \$6,000; two inspectors, at \$1,000 per annum each, \$2,000; two inspectors, at \$900 per annum each, \$1,800; nine inspectors, at \$840 per annum each, \$7,560; fifty-two inspectors, at \$720 per annum each, \$37,440; twenty-five inspectors, at \$600 per annum each, \$15,000; inspector, \$360; clerk-typewriter, \$900; four messengers, at \$300 per annum each, \$1,200; two messengers, at \$240 per annum each, \$480; in all, \$91,680.

Total field force, \$91,680.

*Salaries, leper colony.*—Resident minor surgeon, \$900; engineer-boatman, \$480; attendant, \$420; attendant, \$420; two watchmen, at \$360 per annum each, \$720; two boatmen, at \$300 per annum each, \$600; cook, \$240; three laundresses, at \$210 per annum each, \$630; two servants, at \$180 per annum each, \$360; barber, \$180; cook, \$180; in all, \$5,130.

*General expenses, leper colony.*—Maintenance of 40 patients and 16 employees, at 40 cents per day each, \$8,176; clothing and bedding, \$3,000; purchase of unexpendable property, \$1,000; incidentals—medicines, lighting, toilet articles, cigars and cigarettes, fuel, ice, laundry supplies, repairs to furniture, and for other miscellaneous expenses, \$4,000; in all, \$16,176.

Total, leper colony, \$21,306.

*Salaries, quarantine hospital.*—Superintendent, \$720; nurse, \$480; cook, \$180; laundress, \$180; two servants, at \$180 per annum each, \$360; two servants, at \$156 per annum each, \$312; in all, \$2,232.

*General expenses, quarantine hospital.*—Maintenance of patients and employees, \$2,000; lighting and water, \$500; incidentals—medicines, fuel, etc., \$600; repair of present buildings and construction of sanitary quarters for the proper segregation of transmissible diseases, \$4,500; in all, \$7,600.

Total, quarantine hospital, \$9,332.

Mosquito extermination and control and suppression of malaria, including care of malarial patients, purchase and repair of equipment, construction and repair of buildings, including also purchase of the necessary land, payment of personnel, transportation expenses of patients, and other necessary expenses, \$50,000; in all, \$50,000.

Suppression of anemia, including care of anemia patients, purchase and repair of equipment, construction and repair of buildings, including also purchase of the necessary land, payment of personnel, transportation expenses of patients, and other necessary expenses, \$50,000; in all, \$50,000.

Education and maintenance of indigent deaf and dumb children, \$1,200; in all, \$1,200.

Care of tuberculosis patients; including purchase and repair of equipment, construction and repair of buildings, and insurance of equipment and buildings belonging to the people of Porto Rico, and used as a sanatorium; and including, further, purchase of the necessary land, payment of personnel and transportation expenses of patients, and other expenses, \$100,000; in all, \$100,000.

*Salaries, insane asylum.*—Superintendent, \$2,400; assistant superintendent, \$2,000; physician, \$2,000; requisition clerk and storekeeper, \$1,500; dentist for all charity institutions, \$1,400; clerk, \$600; practicante, \$900; matron, \$600; trained nurse, \$600; carpenter, \$600; mason, \$600; head attendant, \$500; attendant, \$480; barber, \$480; two attendants, at \$420 per annum each, \$840; janitor, \$420; superintendent of kitchen, \$420; porter, \$360; three attendants, at \$360 per annum each, \$1,080; two cooks, at \$360 per annum each, \$720; seamstress, \$300; ten attendants, at \$300 per annum each, \$3,000; ten attendants, at \$240 per annum each, \$2,400; three assistant cooks, at \$240 per annum each, \$720; servant, \$228; five servants, at \$204 per annum each, \$1,020; nineteen servants, at \$204 per annum each, \$3,876; in all, \$30,044.

*General expenses, insane asylum.*—For subsistence for 425 patients and not exceeding 64 employees, at not to exceed 40 cents per diem each, \$71,394; clothing and bedding,

\$5,000; fuel, \$2,500; incidentals, \$2,500; lighting and water, \$2,000; medicines and supplies, \$2,000; transportation of patients, \$2,000; purchase of unexpendable property, \$2,000; in all, \$89,394.

Total, insane asylum, \$119,438.

*Provided*, That any moneys received by the insane asylum from pay patients according to the regulations of said asylum shall be deposited in the treasury of Porto Rico to the credit of the appropriation "Insane asylum," divided equally between the subhead "Subsistence" and the subhead "Clothing and bedding," and shall be available for expenditure during the fiscal year in which they are received.

*Salaries, blind asylum.*—Oculist, \$2,000; manager, \$2,000; assistant manager and trained nurse, \$720; clerk and storekeeper, \$600; matron, \$420; watchman, \$360; assistant matron, \$300; seamstress, \$300; barber, \$300; cook, \$300; two attendants, at \$300 per annum each, \$600; six attendants, at \$240 per annum each, \$1,440; servant, \$204; fourteen servants, at \$156 per annum each, \$2,184; servant, \$204; in all, \$11,932.

*General expenses, blind asylum.*—For subsistence of 108 patients and not exceeding 33 employees, at not to exceed 30 cents per diem each, \$15,439.50; clothing and bedding, \$1,800; purchase of unexpendable property, \$800; medicine and supplies \$1,200; fuel, \$1,800; incidentals, \$1,000; lighting and water, \$500; transportation of patients, both ways, \$500; in all, \$23,039.50.

Total, blind asylum, \$34,971.50.

*Salaries, girls' charity school.*—Superintendent, \$1,800; physician for the boys' and girls' charity schools, \$1,500; clerk, \$900; teacher and pianist, \$780; five teachers, at \$720 per annum each, \$3,600; teacher of drawing and painting for both charity schools, \$720; teacher of domestic science, \$720; visiting inspectress of all administrative services of the institution, \$480; matron, \$500; janitor, \$360; trained nurse, \$480; teacher of straw work, \$360; dressmaker and teacher of plain sewing, \$360; drawn work teacher, \$360; storekeeper, \$360; superintendent of clothing, \$240; four seamstresses, at \$240 per annum each, \$960; shoemaker, \$240; porter and gardner, \$240; three monitresses, at \$300 per annum each, \$900; watchman, \$240; laundress, \$240; three laundresses, at \$96 per annum each, \$288; cook, \$180; assistant cook, \$144; seven servants, at \$96 per annum each, \$672; in all, \$17,624.

For subsistence of not exceeding 300 inmates and 36 employees, at not to exceed 30 cents per diem each, \$36,792; clothing and bedding, textbooks and school supplies, medicines, fuel, incidentals, lighting and water, \$12,500; in all, \$49,292.

Total, girls' charity school, \$66,916.

*Provided*, That any moneys received by the girls' charity school from the sale of articles made by the girls shall be deposited in the treasury of Porto Rico, in a special trust fund, to be known as "Sale of articles, girls' charity school, trust fund," and shall be available for the purchase of raw material for future similar work; for the payment of small amounts to the girls upon leaving the school and for the recreation and amusement of the same; which payments shall be in accordance with the general rules provided by the commissioner of health and for the organization and support of a musical sextet and for the institution of a school library.

*Salaries, boys' charity school.*—Superintendent, \$2,000; assistant superintendent, who shall have charge of the accounting books of the workshops, \$960; clerk, \$900; storekeeper, \$720; eight school-teachers, at \$720 per annum each, \$5,760; school-teacher capable of teaching stenography and typewriting, \$720; teacher of carpentry and cabinetmaking, \$720; teacher of masonry, \$720; teacher of sanitary plumbing, \$720; master shoemaker, \$720; barber, \$420; bandmaster and music teacher (for boys' and girls' charity schools), \$900; instructor of gymnastics and athletic games for boys' and girls' charity schools, \$720; monitor and military instructor, \$500; four monitors, at \$390 per annum each, \$1,560; head monitor in charge of general cleaning, \$560; eight servants, at \$136 per annum each, \$1,088; trained nurse, \$600; master tailor, \$660; matron, \$390; porter and messenger, \$420; matron for small boys, \$390; cook, \$300; assistant cook, \$200; assistant cook, \$150; watchman, \$400; gardener, \$360; laundress, \$300; eight laundresses, at \$222 per annum each, \$1,776; nine seamstresses, at \$222 per annum each, \$1,998; in all, \$27,632.

For subsistence of not more than 400 inmates and 24 employees who, because of the nature of the work, are obliged to remain in the establishment, the same being the assistant superintendent, the storekeeper, the instructor of gymnastics and athletic games, the monitor and military instructor, four monitors, the head monitor in charge of general cleaning, eight servants, the nurse, a matron, the matron for small boys, three cooks and the gardener, at not to exceed 30 cents daily each, \$46,428; clothing and bedding, textbooks and school supplies, medicines, fuel equipment and supplies for industrial training, water, light, incidentals, fertilizers, etc., \$19,000; in all, \$65,428.

Total, boys' charity school, \$93,060.

*Provided*, That any moneys received by the boys' charity school from the sale of articles made and work done inside or outside of the institution by the boys shall be deposited in the treasury of Porto Rico in a trust fund to be known as "Sale of articles and work done, boys' charity school, trust fund," and shall be available for the purchase of raw material for future similar work and for the payment of small amounts or presentation of instruments and tools of arts and trades to the boys upon leaving the school, which payment or presentation shall be in accordance with such general rules as the commissioner of health shall prescribe to govern such cases: *Provided*, That 50 per cent of the receipts from band concerts shall be placed in a special trust fund, known as "Recreation fund," to be expended for library books, athletics, and amusements.

Total, department of health, \$756,453.50.

*Provided*, That medical members of the department of health may practice their profession when such practice does not interfere with their duties.

Total for the fiscal year 1919-20.....	\$756,453.50
Total for the fiscal year 1920-21.....	756,453.50
Total, 1919-20 and 1920-21.....	1,512,907.00

## APPENDIX IV.

### REPORT OF THE AUDITOR, AND CONSOLIDATED FINANCIAL EXHIBITS.

OFFICE OF THE AUDITOR,  
*San Juan, September 9, 1918.*

SIR: Acting under the provisions of section 20 of the act of Congress approved March 2, 1917, entitled "An act to provide a civil government for Porto Rico, and for other purposes," I have the honor to submit herewith a report showing the receipts and disbursements of the various departments of the insular government and of the different municipalities and school boards for the fiscal year ended June 30, 1918, and take this opportunity of making the following comments and recommendations relative to the administration of my office:

#### SYSTEM OF AUDITING AND ACCOUNTING.

There have been no material changes during the year in the system of accounting established under my supervision July 1, 1911. The adaptation of this system to the needs of the insular government is very gratifying, and has been especially appreciated during the fiscal year just passed, when the attention of the auditor has been so much occupied with the preparation of opinions in connection with matters coming within the scope of the new organic act and the holding of conferences with the many officials of the municipalities and school boards with regard to questions concerning their respective offices.

The establishment of a system for the supervision of the various activities of the municipalities and school boards of the island has occupied the attention of this office since the new organic act became operative, and during the period to which this report relates great headway has been made in getting into close touch with the officials, who have, in most instances, shown a ready desire to cooperate in carrying out the provisions of the act. A complete account of the results obtained in this work is to be found in the comments concerning the division of audits.

The attention of the auditor has also been engaged in the interpretation of the different acts approved by the ninth legislature at its regular and extraordinary sessions. On account of the apparent conflict between the laws as approved by the legislature and the provisions of the new organic act, it was deemed necessary to obtain the opinion of the attorney general in several instances. Regarding the appropriations approved, it was found by a careful estimate that there would not be sufficient funds available in the insular treasury to meet all of the appropriations already opened on the books of this office and the new ones approved by the legislature. This condition was in violation of the provisions of section 34 of the new organic act, which reads in part as follows: "No appropriation shall be made, nor any expenditure authorized by the legislature, whereby the expenditure of the government of Porto Rico during any fiscal year shall exceed the total revenue then provided for by law and applicable for such appropriation or expenditure, including any available surplus in the treasury, unless the legislature making such appropriation shall provide for levying a sufficient tax to pay such appropriation or expenditure within such fiscal year." The attorney general, in the opinion rendered by him in regard to this case, stated that "the auditor should not pay out any money under no fiscal year appropriations unless he has ascertained that there will be sufficient funds in the treasury, after allowing for all appropriations entitled to priority, or a tax has been provided for revenues applicable to the expenditures." Consequently the following appropriations, which were approved by the legislature referred to, have not been set up on the books of this office:



*Appropriations authorized at the first regular and extraordinary sessions of the ninth Legislature of Porto Rico, which have not been set up on the books of the auditor.*

Act No.	J. R. No.	Purpose.	Amount.
<b>REGULAR SESSION.</b>			
.....	6	Additional salaries, common schools.....	\$172,000.00
.....	10	Subsidy to Matilde Millín.....	300.00
.....	17	Gratuity to G. Quiñones and wife.....	250.00
.....	18	To organize insular experimental station.....	27,340.00
.....	20	Reimburse school board of Ponce.....	9,659.18
.....	22	Customhouse at Fajardo.....	6,000.00
.....	24	Municipal hospital, Carolina.....	4,000.00
.....	25	Construction of bridge, Río Piedras.....	4,000.00
.....	26	Construction of bridge, Trullillo Alto.....	10,000.00
.....	27	Construction of hospital in Toa Alta.....	2,000.00
6	.....	Textbooks in high schools.....	5,000.00
17	.....	Machinery for reform school.....	4,800.00
22	.....	Forest service in Porto Rico.....	6,000.00
28	.....	Construction of houses for laborers.....	25,000.00
29	.....	Reorganizing the department of agriculture and labor.....	35,100.00
34	.....	Reimburse Pedro Martínez.....	100.00
38	.....	Education of deaf and dumb children.....	5,000.00
43	.....	Public park in the municipality of San Juan.....	50,000.00
58	.....	General agency in New York.....	20,000.00
60	.....	Legislative library.....	10,000.00
61	.....	Complete Luquillo schoolhouse.....	3,000.00
63	.....	San Juan-Martin Pena Road.....	100,000.00
64	.....	School buildings (4).....	34,000.00
66	.....	School building, Comerio.....	10,000.00
67	.....	School building, Isabela.....	4,000.00
68	.....	School building, San Sebastián.....	10,000.00
69	.....	Provide additional revenue.....	50,000.00
70	.....	Public service commission.....	8,000.00
73	.....	Gratuity for municipality of Culebra.....	2,500.00
75	.....	Construction of road, Jayuya.....	4,000.00
76	.....	Construction of road, Lajas-Guanica.....	20,000.00
77	.....	Construction of bridge, Caguitas River.....	10,000.00
78	.....	Construction of bridge between Caguas and Las Piedras.....	15,000.00
79	.....	Repair of pier at port of Mulas, Vieques.....	1,500.00
80	.....	River defense fund.....	10,000.00
81	.....	Hospital in Comerio.....	6,000.00
82	.....	Artesian well in Vieques.....	5,000.00
83	.....	School building in Barros.....	4,000.00
84	.....	Road construction, No. 1 from Toa Baja to road No. 2.....	5,000.00
85	.....	Culebra pier.....	3,000.00
87	.....	Hospitals in Río Grande and Aguadilla.....	10,000.00
88	.....	Hospital in Vea Baja.....	6,000.00
89	.....	Instruction and training of young men from Porto Rico in the United States.....	500.00
89	.....	Scholarship for José Colón Román.....	600.00
89	.....	Scholarship for Ricardo Hernández Romero.....	600.00
89	.....	Scholarship for Jesús María Sanromá.....	600.00
89	.....	Scholarship for Sara Aparicio Henna.....	500.00
89	.....	Construction of building for college of law and pharmacy.....	40,000.00
<b>Total, regular session.....</b>			<b>761,149.18</b>
<b>EXTRAORDINARY SESSION.</b>			
2	.....	Special police during war.....	20,000.00
7	.....	Locating a bridge over Grande River, Arecibo.....	5,000.00
8	.....	Continue the study of irrigation of lands in the valley of Lajas and Isabela.....	8,000.00
15	.....	Internal revenue law (reimbursement of excise taxes on liquors exported).....	100,000.00
16	.....	Resident commissioner in Washington (auto).....	5,000.00
24	.....	School building in San German.....	20,000.00
25	.....	Expenses of \$300,000 bond sale.....	1,000.00
.....	1	Road from Ceiba to port of Ensenada Honda.....	10,000.00
<b>Total, extraordinary session.....</b>			<b>169,000.00</b>
<b>Total, regular and extraordinary sessions.....</b>			<b>930,149.18</b>

The question also arose as to the legality of the appropriations provided in the general appropriation act for scholarships for several persons completing their studies in the United States. These appropriations were held to be invalid for the reason that they were in conflict with the terms of that part of section 34 of the new organic act which provides that "The general appropriation bill shall embrace nothing but appropriations for the ordinary expenses of the executive, legislative and judicial departments, interest on the public debt, and for public schools. All other appropriations shall be made by separate bills, each embracing but one subject;" and also because they were

considered to be in the class of donations, appropriations for which are prohibited by the bill of rights of the new organic act.

The appropriation provided for in the act creating the municipality of Culebra was also considered to be in violation of the provisions of the new organic act which states that all expenses incurred by the municipalities shall be paid out of the municipal revenues. Due to the fact that Culebra would not have sufficient revenues to pay expenses as a municipality without the appropriation mentioned, it has been decided to postpone the installation of a municipal government until the revenues are adequate for the purpose. Fortunately provision was made in the regular budget of the insular government for the expenses of Culebra as a special municipal district, which has been its status since March 8, 1905, so that funds for expenses which may be incurred are available for the fiscal year 1918-19.

Owing to the difficulties caused during the year by appropriations having been made without due regard to the restrictions imposed by the new organic act, it would seem that some system should be planned whereby the legislature would at all times be informed as to the estimated amount of funds available for appropriations approved for which no special tax is levied. If it were possible to pass the budget, which has precedence over other appropriations, early in the session, that part of the estimated receipts which would be available for other appropriations could then be ascertained. This office is in a position to render valuable assistance in matters relative to the government's financial operations and would gladly furnish its services whenever requested to do so.

With reference to appropriations standing on the books of this office, attention is directed to Exhibit No. 29, in which it is estimated that there will be a deficit of \$418,213.16 at the close of the year 1918-19, if expenditures sufficient to exhaust all appropriations standing available on the books should be made during the year. This condition is largely due to the necessity of carrying on the books of this office several accounts of large no fiscal year appropriations such as "Erection of an insular capitol building," \$287,161.46; "Construction of a model penitentiary," \$117,508.89; "Construction of a district jail at Arecibo," \$20,000, and "Construction of an insular building in the city of Guayama," \$50,000, all of which are at present carried as open accounts. As the present condition of the insular treasury will not permit the expenditure of funds under these appropriations, I would recommend that they be canceled by legislative action. By this procedure other appropriations of lesser amounts could be approved for important work requiring immediate attention and the funds for the purpose would be available. As the no fiscal year appropriations are a charge against each succeeding year's revenues, it would be advisable to create as few as possible in order to properly legislate and make appropriations within the revenues of each fiscal year.

I would further recommend in connection with appropriations that, for the purpose of obtaining a satisfactory comparison of expenditures of the different departments, the division of appropriations suggested by the committee on finance and appropriations for the fiscal year 1915-16 be adhered to as closely as possible by all departments in the preparation of their budgets for general expenses. The division referred to separates the appropriations into comprehensive subheads which enables any one to ascertain for what purpose the expenditures of the department have been made. It would be amply adequate for the needs of all departments for ordinary expenses and should prove helpful to the legislature in acquiring a clear idea of the application intended of the funds requested by the departments. As the appropriations are approved at present, one department may have a sufficient division to furnish all of the information that may be needed while another department may have only one general heading to which must be charged all classes of expenses. A uniformity of subheads would be of great assistance to the division of disbursements and claims of this office by mostly eliminating the confusion in the classification of expenses which now exists in the audit of accounts submitted for settlement.

In accordance with the authority conferred upon me by the provisions of Paragraph II of section 20 of the new organic act, it was found necessary during the year to bring to the attention of certain administrative officers expenditures of funds which, in my opinion, were irregular in some instances while in others I considered them to be either excessive or extravagant. I am glad to state, however, that such cases have been very few for the year and I feel that in time there will be none at all, when the provisions of the new organic act have become more generally understood.

## FINANCIAL EXHIBITS

The exhibits appearing in this report were prepared by the following departments or offices:

Auditor of Porto Rico: From No. 1 to No. 5, inclusive; Nos. 11, 12, and 13; No. 22 (disbursements); Nos. 24, 25 and 26; No. 27 (disbursements); No. 28 (disbursements); No. 29.

Department of Finance: Nos. 6 to 9, inclusive; Nos. 14, 19, 19-A, 19-B, 20, 20-A, 21, 22 (receipts), 23, 27 (receipts); and No. 28 (receipts).

University of Porto Rico: Nos. 15 to 18, inclusive.

Department of the Interior: No. 10, and Nos. 30 to 34, inclusive.

Porto Rico Irrigation Service: Nos. 35, 36 and 37.

COMPARATIVE STATEMENT OF ACCRUED EXPENSES PAYABLE FROM INSULAR REVENUE APPROPRIATIONS FOR THE YEARS ENDED JUNE 30, 1917, AND JUNE 30, 1918 (EXHIBIT No. 5.)

A net increase of \$326,619.66 is shown in the expenditures from appropriations for the fiscal year 1917-18 as compared with those for the prior year. This increase is made up of \$170,317.48 in salaries and \$156,302.18 in the items for other expenses of the government. The increase in salaries is explained in most cases as due to the increase in personnel of various departments, required to carry on new activities imposed upon them by the new organic act, while that in other expenses is caused not only by increased activities but also by the abnormal conditions due to the world war and the higher cost of all kinds of articles used by the different government institutions.

Increases and decreases are explained in detail as follows:

*Executive council.*—The decrease of \$28,929.74 is due to that body having ceased since August 12, 1917. The same is the case with the decrease of \$29,011.76 in the house of delegates. Against such decreases, increases of \$34,865.97 and \$49,002.80 are shown by the senate and house of representatives, respectively. The net increase of \$17,892.80 in the total miscellaneous legislative is due to the creation of the translation bureau, which became necessary to carry on services required by the legislature, and also the creation of the public service commission provided by the new organic act, thus increasing the total legislative expenditures for the year by \$43,920.07.

The bureau of supplies, printing, and transportation, a subdivision of the office of the executive secretary, shows in all a net increase of \$4,727.58. This is mostly due to the increased cost of supplies as well as the necessity of increasing the personnel.

The office of the attorney general shows an increase of \$13,390.78 expended in salaries. This is due to the increased salary of the head of the department, as well as to the increased activities of the department of justice in connection with the administration of the penal institutions and other judicial affairs. The excess of \$3,874.92 shown in the expenses for salaries of the penitentiary is due to having increased the number of guardsmen and their compensation for the year just past. Other increased expenses of the penitentiary are \$10,444.98 for food for prisoners and \$2,860.16 for clothing caused by the actual high cost of groceries and articles of clothing. The San Juan jail, showing an increase of \$18,034.64, and the Arecibo jail, with an increase of \$14,700.84, are new institutions, their increase being offset to a very large extent by a decrease of \$30,617.20 in the expenditures of the San Juan and Arecibo district jails, which combination has been discontinued. The increased expenses of \$2,599.85 in the Humacao jail and \$1,422.58 in the Aguadilla jail were caused by the increased cost of articles of food as well as other supplies. The women and children wards, the expenses of which show an increase of \$1,713.35, are new institutions which became necessary in order to have a proper place for the seclusion of women and children.

The expenditures for salaries in the department of finance for the year ended June 30, 1918, show an excess of \$17,333.63 over expenditures of the same nature for the fiscal year ended June 30, 1917. An excess of \$3,097.94 is shown by incidentals and traveling expenses, \$1,666.97 by postage and express, and \$8,810.04 by engraving plates and printing internal-revenue stamps. The increase in salaries, as well as those in incidentals and traveling expenses and postage and express, are due mostly to increase in the personnel and new activities of the department in the levying and collection of extra taxes which are intended to cover the deficit in the insular revenues caused by the prohibition clause of the organic act which went into effect on March 2, 1918. The increase of \$8,810.04 in the purchase of plates and printing internal-revenue stamps was due to the issuance of new a series of cigarette stamps which was effected during the fiscal year just past. The reassessment of the property having been practically terminated during the fiscal year 1916-17, no expen-

ditures were incurred for that purpose during 1917-18, thus making up the reduction of \$72,989.57 appearing in the corresponding appropriations.

A net increase of \$17,577.93 shown in the expenditures of the office of the auditor is mostly due to the addition to this office of the division of audits, which handles the accounts of the municipalities and school boards.

The department of the interior shows a net increase of \$16,867.01, \$9,083.59 of which was absorbed by salaries. As well as in the case of other departments, the increase in the department of the interior is due to the high cost of articles used by that department, as well as the necessity of increasing the personnel and their salaries in order to carry on new work. In the maintenance and repair of public roads and bridges there was expended the sum of \$116,450.64 more in the fiscal year 1917-18 than in the fiscal year 1916-17. The increased mileage of roads constructed, as well as the high cost of labor and other materials, have been the causes of such excess. The same explanation applies to the excess of \$22,520.04 in the expenditures incurred for maintenance, repair, and reconstruction of public buildings. A net increase of \$12,047.40 in the expenses of the bureau of insular telegraph was absorbed by the increased cost of materials and labor used to carry on the telegraph business, as well as by the extension of lines and service.

The department of education shows an increase of \$3,166.30 in the appropriation for salaries. Such increase was due to the necessity of personnel in that department for the administration of the charity schools which were carried under the department of education for a large part of the fiscal year. The amount of salaries paid to common-school teachers during the year was \$7,555.28 less than that paid during the prior year, this decrease being due in most cases to the lack of teachers to carry on the work of the public schools. The increase of \$22,019.09 in the salaries of high schools was due to the necessity of increasing the number of high school and continuation teachers to carry on the work of the higher grades. The net expenses for textbooks, school supplies, and equipment show a decrease of \$20,302.89, which is due to the receipts during the year from the sale of textbooks, other supplies, and credits of varied nature. The decreases shown in appropriations for scholarships for students in the United States were due to the fact that the few appropriations made for that purpose during the fiscal year 1917-18 are now carried under general miscellaneous. The sum of \$1,814.57 shown as an increase in the publication of an educational review will be repaid from the proceeds of the sale of this periodical as well as from the receipts for advertisements, which will take care of the publication expenses in the future.

The development of the Carnegie Library has made it necessary to increase the expenditures of that institution by \$1,419.12, as shown.

Although the department of agriculture and labor is new in many respects, its expenditures compare favorably with those of the prior years. The decrease of \$11,842.85 in the salaries of the general office, due to the transfer of penal institutions to the department of justice, offsets in part the increases of \$5,615.34 in the bureau of agriculture, \$4,358.77 in the bureau of labor, and \$6,615.02 in the experimental station and field force. Such increases in the latter dependencies are mostly due to the character of their work which in most cases has been more actively carried on during the year. The bureau of agriculture and the experimental station have carried the burden of the work due to the investigations of plant diseases.

An increase of \$34,583.50 in the expenditures of the insular police is made up principally by \$21,512.20 in salaries, caused by the creation of the position of adjutant, at \$2,400 per annum, and the advance in the salaries of 577 guardsmen from \$456 to \$480 per annum, \$7,192.67 expended in special guardsmen for the elections held in July, 1917, and \$3,009.70 in additional pay for reenlistment of men whose services were valuable to the department.

Reorganization brought to bear on the expenditures of the department of health resulted in an increase of \$81,768.35 in the net expenditures of that department. Act No. 71, approved December 6, 1917, carried deficiency appropriations for that department amounting to \$208,233. The principal increases were \$26,051.89 in the office of the commissioner, \$5,157 in the leper colony, \$2,732.51 in the quarantine hospital, \$6,619.84 in the field force, \$2,376.15 in suppression of anemia, \$4,446.09 in the blind asylum, \$21,738.70 in the insane asylum, \$3,533.79 in the girls' charity school, \$2,348.80 in the boys' charity school, and \$8,900.37 for miscellaneous expenditures. The principal items of increase were salaries, subsistence, and contingent expenses. The increases in the salaries were mostly due to new activities of the department, and those for subsistence and contingent expenses were due mostly to the high cost of articles mentioned in the case of other departments.

The general miscellaneous expenses of the Government show a net decrease of \$17,104.79, due mostly to the transfer to the department of health of the expenditures

in connection with the care of tuberculosis patients and the relief to the deaf and dumb asylum, which were formerly carried under the item sundry pensions and reliefs.

As the expenditures of the United States district court have been paid by the Federal Government since the new organic act became effective, this item shows a decrease of \$26,805.09. The supreme court's expenses for salaries were \$3,610.01 more for the year than for the prior one. The increased salaries of the judges provided by the new organic act account for the extra expenditure. Fees of witnesses appearing before the district courts were \$4,201.74 in excess of the prior year, and this was mostly due to a larger amount of work carried on by the courts. During the fiscal year 1916-17 the municipal courts throughout the island were quartered by the municipalities, but for the fiscal year 1917-18 the insular government reassumed this expenditure, carrying the amount of \$6,563.20, which is the most notable increase in the expenditures of the municipal courts. The necessity of more personnel to carry on effectively the work of the registrars of property made it necessary to increase the appropriations for salaries of those institutions, and the result was an excess of \$5,047.72 in that item as compared with the expenditures for the prior year.

#### DIVISION OF GENERAL ACCOUNTS.

The confusion in opening accounts for the new appropriations has greatly delayed the general work of this division. It was not possible to prepare the digest of appropriations at the usual time, which resulted in a delay in the opening of the ledgers for the new year. On the other hand, however, the division was able to write off, by means of surplus fund warrants, many balances standing to the credit of appropriations for public improvements, under which the work had been completed, with the result that many old no fiscal year accounts which had been carried for several years have disappeared. If the legislature should take the necessary action to authorize the closing of several large no fiscal year appropriations which are not being used, the books of this division would then carry but few dead accounts.

In work relating to the collection of outstanding accounts, the division has been engaged in the classification of the vessels plying between ports and which are obliged to pay wharfage fees in accordance with section 536, Revised Statutes of Porto Rico. In the many instances where it was found that fees had not been collected action was taken to effect such collections, with the result that at the present time there are but few accounts unpaid. The verification of the tonnage of foreign vessels has been found quite difficult on account of the constant changes being made in the structure of the vessels for the accommodation of cargo.

At the beginning of the year the division was relieved of that part of the work formerly done by it in connection with the audit of the accounts of the collectors of internal revenue and stamp agents, which work was taken over by the newly created division of audits. As the personnel in charge of this work was transferred also to the division named, the work of the division of general accounts continued to be as heavy as before. The legislature, however, provided increased compensation in the budget for 1918-19 for the employees of the division, which has allayed the apparent unrest caused by offers of higher salaries from different sources, and it is hoped that there is now sufficient inducement for the present force to continue in the service.

#### DIVISION OF DISBURSEMENTS AND CLAIMS.

During the year this division audited vouchers and prepared checks to the number of 105,765, covering disbursements aggregating \$12,749,707.72.

The work in connection with the audit of accounts submitted for payment has required careful attention on account of the various changes caused by the provisions of the new organic act. The departments, however, have by now become accustomed to such changes as were necessary to have vouchers conform to the requirements of the new act, so that there should be but little if any trouble during the next year.

The contracts for supplies and public construction work require great care and charges under them are verified by two persons before payment is authorized. This system of duplicate verification is now being used in connection with the audit of all vouchers and has been found to be very satisfactory. While it would seem that the system would cause delay in the payment of accounts, such is not the case. There are complaints received sometimes on account of delays in the settlement of claims, but in nearly every case it has been found that such delays were due to errors in the preparation of the vouchers or pay rolls or that the necessary supporting papers had not been furnished.

## DIVISION OF AUDITS.

Due to the additional work undertaken by the office of the auditor, in relation to the municipalities and school boards, it became necessary to create a new division in the office. Application was made to the eighth legislative assembly for the necessary appropriation of funds for the personnel, and the new division came into existence on July 1, 1917, the date on which the appropriation became available.

Paragraph I of section 20 of the new organic act states in part that the auditor "shall examine, audit, and settle all accounts pertaining to the revenues and receipts, from whatever source, of the government of Porto Rico and of the municipal governments of Porto Rico, including public trust funds and funds derived from bond issues; and audit, in accordance with law and administrative regulations, all expenditures of funds or property pertaining to or held in trust by the government of Porto Rico or the municipalities or dependencies thereof."

Paragraph V also provides that "with the approval of the governor, he shall from time to time make and promulgate general or special rules and regulations not inconsistent with law covering the methods of accounting for public funds and property, and funds and property held in trust by the government or any of its branches."

Under the authority of the foregoing provisions of the law this division proceeded to prepare the necessary forms and regulations by which to acquire the necessary information to enable the auditor to exercise the proper supervision over the operations of the municipalities and school boards, of which there are 152 in all.

Early in the year a set of rules and regulations for the accounting of unexpendable property by the municipalities and school boards was promulgated, with the approval of the governor. The necessary books and forms were also prepared so as to obtain monthly statements of their receipts and expenditures.

The results obtained are set forth in the following tables:

TABLE 1.—Statement of receipts of the various municipalities of Porto Rico for the fiscal year ending June 30, 1918.

Municipalities.	Balance July 1, 1917.	Cash bond deposits.	Proceeds from loans.	Other trust funds.	Property tax.		Operation of public utilities.	Industrial and commercial licenses.	Repayments.	Use of municipal property.	Miscellaneous.	Total.
					Road fund.	General fund.						
Adjuntas.....	\$983.41	\$2,000.38			\$1,217.89	\$10,199.44		\$1,707.30	\$164.88	\$449.22	\$109.16	\$16,901.68
Agüada.....	3,309.94				1,243.26	11,742.63		5,437.92	66.00	114.00	258.02	15,941.77
Agüadilla.....	1,444.92		\$6,000.00	\$642.11	1,402.93	10,749.40	\$4,385.35	5,441.36	128.84	2,049.44	1,486.87	34,731.22
Agüas Buenas.....	1,243.39	2,767.00			331.16	2,776.64		1,948.32	62.72	366.75	727.50	9,219.48
Albionito.....	4,335.52	108.81	8,000.00	220.00	736.10	6,164.94	2,415.50	1,131.31	88.94	516.70	1,034.09	24,761.91
Anasco.....	894.82				1,247.95	10,450.61		8,367.64	98.48	158.45	858.83	14,671.68
Arrecibo.....	25,584.46	2,789.17	77.88	28.39	6,363.71	44,924.32	20,264.44	8,365.48	1,049.37	2,713.22	5,722.37	116,877.81
Arroyo.....	3,560.42	187.00			971.29	12,339.44	1,581.89	1,440.09	161.42	635.10	7,799.24	17,421.15
Barceloneta.....	4,359.11	600.00			1,473.33	12,339.44		1,440.09	96.96	177.00	854.20	21,049.30
Barraquitas.....	1,399.74				358.82	3,006.15	850.00	1,460.76	25.98	154.10	422.22	6,677.47
Barros.....	4,676.39				565.82	4,738.86		501.35	125.16	69.85	283.93	6,761.36
Bayamon.....	4,674.65	120.00		20.00	2,914.34	24,409.04		5,492.53	744.71	1,218.65	6,789.60	46,383.52
Cabo Rojo.....	4,444.25				1,449.53	12,158.74		1,174.87	190.88	1,039.97	2,445.83	22,904.07
Caguas.....	14,374.07	2,628.76			3,137.35	26,277.97	1,428.42	5,187.12	400.35	9,121.98	5,883.87	65,439.84
Camuy.....	1,137.06	397.00			1,154.11	9,665.91		1,659.01	112.25		75.75	14,201.09
Carolina.....	4,232.98	1,316.00		60.00	1,713.41	14,849.68	6,636.93	1,274.76	190.68	706.50	1,473.17	39,642.51
Cayey.....	7,491.45	875.00			1,902.46	15,933.31		3,038.03	260.74	1,890.49	1,584.16	5,506.13
Cebalpa.....	1,176.60				388.99	3,254.99		1,693.39	62.92	38.75	372.71	17,753.44
Cidra.....	2,564.46	152.00			1,137.74	9,528.62	1,281.30	1,693.65	94.49	462.25	839.19	19,156.82
Ciudad.....	1,637.15				649.02	4,897.97		1,938.65	77.62	698.06	608.45	19,380.54
Ciudad Vieja.....	1,065.84				1,194.70	10,005.79	3,888.34	1,468.97	122.82	939.08	1,165.00	28,089.46
Comerio.....	5,922.08	1,637.00			1,410.66	11,816.74	1,273.29	1,136.39	442.76	467.91	1,922.64	26,069.46
Corrao.....	2,363.56	200.00			396.83	3,239.50	821.50	1,088.56	76.96	328.80	709.46	9,227.76
Dorado.....	1,977.52	386.00	1,000.00		2,252.11	18,961.76	6,005.50	3,166.25	366.17	1,867.82	3,028.98	52,889.45
Florida.....	3,256.70			16.00	2,252.11	18,961.76	6,005.50	3,166.25	366.17	1,867.82	3,028.98	52,889.45
Guadalupe.....	14,686.46				1,010.92	8,466.18	49.50	3,583.52	102.24	448.25	3,800.06	27,866.61
Guayanilla.....	14,836.32	321.80		1,198.66	2,682.77	22,468.27	14,594.60	3,515.91	454.21	2,269.40	3,800.06	65,300.66
Guayama.....	5,846.06		1,500.00		1,236.66	10,832.13	893.00	815.91	50.28	133.21	341.53	22,537.04
Guaynabo.....	2,147.96				640.25	5,362.95		450.57	64.23	80.00	311.17	7,063.92
Hatillo.....	1,753.24	10.80			390.15	7,294.85	2,106.00	843.15	19.94	643.83	1,301.18	11,063.97
Hermiguares.....	2,772.18				600.44	7,076.65		501.31	134.64	37.26	520.30	11,063.97
Huacaja.....	21,243.03	4,800.25		150.00	2,548.19	21,509.44	4,712.50	4,301.51	12.60	2,086.52	7,001.39	60,728.35
Isabela.....	2,806.74				644.57	9,901.90		1,714.80	226.83	38.00	62.75	11,338.47
Jayuya.....	2,742.34	35.94	4,000.00		1,636.47	13,795.61	308.74	1,525.06	73.18	19.00	478.44	20,488.91
Juncos.....	3,914.70	1,026.00			2,812.99	10,869.79	157.00	1,048.67	302.15	1,048.67	428.40	24,576.80
Lajas.....	1,485.88	818.13			1,238.70	10,374.19	2,629.63	2,000.22	124.24	1,094.10	228.14	24,739.83
Lares.....	7,672.00	392.00			1,651.57	13,845.77	2,009.77	2,105.47	362.76	1,563.95	883.96	30,533.75
Las Marías.....	1,495.95				1,051.63	8,806.28		2,180.44	35.28	1,136.70	200.24	11,916.39
Las Piedras.....	2,231.16				576.71	4,645.64		463.38	42.12	499.76	331.33	5,751.10

Loma.....	4,984.22	5,178.00	.....	1,717.47	14,388.62	.....	1,036.35	76.56	1,597.62	544.75	29,519.62
Luquillo.....	2,597.65	48.90	.....	500.58	4,192.27	.....	347.63	118.22	429.00	286.53	8,571.70
Manati.....	3,078.73	6,587.50	.....	1,861.32	15,804.89	.....	2,817.44	210.68	946.74	4,302.15	35,299.45
Maricao.....	2,344.38	.....	.....	994.08	8,326.40	.....	852.50	52.97	57.37	900.16	13,271.61
Maunabo.....	3,596.52	327.00	.....	547.87	4,586.26	.....	901.70	57.12	568.10	523.17	11,928.51
Mayaguez.....	9,513.99	.....	.....	5,431.23	45,400.97	.....	8,844.00	241.92	10,623.24	9,596.97	113,039.64
Moca.....	675.61	.....	.....	647.90	5,426.32	.....	303.68	100.68	96.50	52.68	7,303.37
Morovis.....	1,014.47	16.00	.....	491.10	4,113.08	.....	579.17	23.11	836.39	377.65	7,450.92
Naguabo.....	8,810.37	.....	.....	1,276.83	10,468.36	.....	1,427.67	98.28	1,135.05	2,643.99	26,085.55
Naranjito.....	888.08	.....	.....	254.97	2,135.35	.....	600.25	44.16	386.98	150.29	4,624.08
Patillas.....	960.53	.....	.....	971.51	8,136.32	.....	471.56	131.43	560.00	606.70	13,560.41
Penuelas.....	1,386.91	.....	.....	815.31	6,676.53	.....	680.77	91.14	282.44	175.37	10,554.62
Ponce.....	6,244.59	320.00	.....	10,978.70	92,248.53	.....	19,332.05	23,702.00	22,757.88	9,049.77	315,829.38
Quebradillas.....	768.81	.....	.....	533.65	4,406.10	.....	44.00	23,702.00	22,757.88	9,049.77	315,829.38
Rio Grande.....	2,327.74	.....	.....	596.38	4,768.50	.....	1,088.06	16.22	86.94	253.64	7,310.44
Rio Piedras.....	1,963.87	1,355.00	.....	1,117.08	9,365.60	.....	722.37	90.84	531.75	1,041.40	16,256.91
Salinas.....	2,521.53	.....	.....	3,198.67	26,786.27	.....	3,655.97	204.60	3,008.90	2,960.01	63,452.37
Sabana Grande.....	.....	.....	.....	460.39	3,855.70	.....	1,149.57	61.44	354.70	1,192.06	9,596.39
San German.....	1,919.93	8,012.29	.....	3,029.07	25,368.45	.....	1,556.47	209.64	608.96	1,624.68	41,607.65
San Juan.....	46,533.89	13,526.99	.....	1,690.31	14,072.94	.....	3,343.01	147.72	1,974.96	2,768.57	123,944.73
San Lorenzo.....	1,276.23	6,319.00	.....	13,939.75	196,158.39	.....	48,842.20	3,404.27	26,750.92	31,406.91	1,127,714.43
San Sebastian.....	6,164.72	245.00	.....	1,434.41	12,013.29	.....	1,026.54	102.79	1,615.17	1,494.91	17,115.47
Santa Isabel.....	3,403.62	.....	.....	1,644.35	13,771.32	.....	1,668.22	256.60	394.26	999.96	23,246.10
Sta Alta.....	1,719.35	83.98	.....	522.36	4,374.71	.....	1,044.50	35.84	365.96	906.27	19,060.42
Toa Baja.....	3,406.48	820.00	.....	1,404.83	11,765.46	.....	672.76	86.90	187.50	682.71	19,026.64
Trujillo Alto.....	5,001.60	.....	.....	708.91	6,937.11	.....	202.11	23.62	56.60	932.15	12,862.00
Utuado.....	4,034.00	95.00	.....	2,071.16	17,546.04	.....	1,614.08	226.84	601.45	1,458.98	32,049.53
Vega Alta.....	2,236.20	.....	.....	894.83	7,494.30	.....	1,779.55	38.36	13.00	199.46	12,645.70
Vega Baja.....	4,265.13	561.50	.....	1,496.56	12,307.66	.....	2,581.14	423.73	390.94	2,016.56	24,026.12
Vieques.....	3,291.18	.....	.....	2,010.34	16,898.62	.....	1,692.93	228.35	563.71	1,249.00	25,817.94
Villalba.....	5,523.96	6,637.00	.....	419.67	3,308.30	.....	8.81	165.00	133.00	133.00	6,004.71
Yabucoa.....	8,815.49	.....	.....	1,918.37	12,716.24	.....	1,691.25	154.80	1,991.25	4,352.60	39,542.78
Yauco.....	7,815.49	4,321.30	.....	1,861.37	15,940.34	.....	2,950.96	324.46	1,991.25	4,352.60	43,462.78
Total.....	353,176.90	97,482.49	738,054.24	63,889.70	1,102,751.07	221,475.61	202,085.66	38,851.35	120,689.46	146,547.56	3,208,664.76



This table shows the receipts of the 76 municipalities for the year. On July 1, 1917, the total balance in the various municipal treasuries amounted to \$353,176.80, and there has been received by them during the year from the sources shown the sum of \$2,855,487.96, making total of cash available for expenditures of \$3,208,664.76. As this is the first year the office intervened in the financial operations of the municipalities no figures are available to serve as a basis for comparison with previous years, but in the future this office will be in a position to gauge effectively the municipal finances.

TABLE 2.—Statement of disbursements of the various municipalities of Porto Rico for the fiscal year ending June 30, 1918.

Municipalities.	Cash bond deposits.	Road fund.	Other trust funds.	Repayment of loans.		Salaries.
				Principal.	Interest.	
Adjuntas.....	\$1,869.76	\$1,263.43				\$7,240.00
Aguada.....		1,047.72				6,582.27
Aguadilla.....	503.52	1,198.52	\$294.38	\$5,500.00	\$4,548.99	8,653.15
Agua Buenas.....	2,762.00	207.60	31.80	300.00	102.52	2,389.06
Albionto.....	75.00	623.33		1,500.00	622.10	6,531.33
Añasco.....		1,302.82		1,000.00	90.00	7,470.00
Arecibo.....	2,675.87	876.27				40,826.21
Arroyo.....	91.64	887.09				5,899.89
Barceloneta.....	625.00	1,409.30		500.00	135.00	7,959.01
Barranquitas.....		124.72			149.63	2,807.43
Barros.....		475.90				3,064.93
Bayamon.....	114.00	1,831.18	20.00	2,000.00	540.00	18,802.81
Cabo Rojo.....	121.30	1,477.36				9,971.56
Caguas.....	2,352.57	3,096.57	1,535.93	5,000.00	3,600.00	21,133.52
Camuy.....	316.00	1,147.94				6,142.60
Carolina.....	1,436.00	1,377.47				10,250.31
Cayey.....	700.00	1,359.75	58.05	2,500.00	1,687.50	10,882.68
Ceiba.....		486.86				2,412.14
Ciales.....	112.50	913.00		1,500.00	1,080.00	6,158.96
Cidra.....		740.61				3,753.49
Coamo.....		1,093.90		2,500.00	450.00	8,504.63
Comerio.....	1,602.00	999.15		1,000.00	540.00	8,661.40
Corozal.....	230.00	597.70		300.00	192.00	3,670.90
Dorado.....		869.64	35.20	500.00	247.50	3,954.48
Fajardo.....	497.35	1,494.87	16.88	6,500.00	4,438.38	13,533.25
Guanica.....		566.36		1,355.22	884.28	9,308.44
Guayama.....	275.20	2,842.10	328.46	1,500.00	315.00	18,223.13
Guayanilla.....		756.87	2,052.68	1,500.00	820.13	5,566.84
Guaynabo.....		770.36				3,031.44
Gurabo.....		1,038.95		1,565.00	956.70	5,111.66
Hatillo.....		961.69				4,689.83
Hormigueros.....		695.04				3,870.63
Humacao.....	4,790.00	2,911.56		2,000.00	2,385.00	19,558.99
Isabela.....		869.65		500.00	157.50	5,213.99
Jayuya.....		535.30		500.00	112.50	4,574.89
Juana Diaz.....	12.00	1,217.08		750.00	30.00	7,822.56
Juncos.....	1,023.20	1,129.22		2,000.00	1,440.00	9,622.89
Lajas.....	848.00	1,206.71				6,517.42
Lares.....	342.00	1,446.42		1,500.00	2,362.50	7,673.56
Las Marias.....		1,068.22				5,341.35
Las Piedras.....		322.39				3,003.64
Loiza.....	5,218.00	1,855.85		1,600.00	25.42	9,341.96
Luquillo.....	49.90	190.56				3,381.70
Manati.....	6,920.00	1,552.31				12,702.06
Maricao.....		895.91		1,000.00	135.00	4,887.54
Maunabo.....	302.00	223.05				5,045.30
Mayaguez.....		5,716.83	5.70			41,329.03
Moca.....		545.41		5.25		2,964.81
Morovis.....	16.00	529.12				3,444.65
Naguabo.....		4,283.35				8,860.40
Naranjito.....		192.20		200.00	33.00	1,943.00
Patillas.....		1,198.53	9.00	442.31	8.73	5,522.88
Peñuelas.....		938.90	30.00	600.00	560.25	4,099.12
Ponce.....	54.00	8,263.02	43,804.00	21,000.00	18,868.13	96,491.71
Quebradillas.....		558.00		170.00	40.80	3,304.57
Rincon.....		505.51				3,240.93
Rio Grande.....	1,355.00	1,607.62				7,004.27
Rio Piedras.....	19,424.77	3,452.99		2,000.00	540.00	19,620.18
Sabana Grande.....		488.96				3,990.99
Salinas.....		2,454.90	3.00	3,000.00	1,068.00	12,654.55
San German.....	7,902.29	1,576.17				12,128.96
San Juan.....	13,833.41	13,498.94		41,390.58		187,988.09
San Lorenzo.....	6,324.00	677.34		560.75	60.75	4,379.40
San Sebastian.....	240.00	1,704.02		1,300.00	501.75	7,041.75
Santa Isabel.....		1,341.86				7,718.43

TABLE 2.—Statement of disbursements of the various municipalities of Porto Rico for the fiscal year ending June 30, 1918—Continued.

Municipalities.	Cash bond deposits.	Road fund.	Other trust funds.	Repayment of loans.		Salaries.
				Principal.	Interest.	
Tos Alta.....	\$93.98	\$1,063.41	\$168.00	\$150.00	\$30.53	\$3,819.92
Tos Baja.....	845.00	1,549.59		1,000.00	405.00	5,517.80
Trujillo Alto.....		708.38				3,818.09
Utuado.....	145.00	1,910.85		2,012.07	241.10	11,427.81
Vega Alta.....		828.77		1,000.00	270.00	5,312.33
Vega Baja.....	634.50	1,150.32				8,390.61
Vieques.....		1,865.63		1,500.00	1,012.50	9,717.48
Villalba.....		479.94	64.00			1,554.14
Yabucoa.....	6,625.00	2,080.41				11,071.16
Yauco.....	4,413.70	2,330.54		5,000.00	3,262.50	11,428.53
Total.....	97,771.46	113,449.81	48,457.08	127,701.18	54,950.69	887,479.34

Municipalities.	Purchases of unexpended property.	Purchases of supplies.	Wages and per diems.	Miscellaneous.	Total.
Adjuntas.....	\$362.54	\$3,713.21	\$676.39	\$1,145.29	\$16,270.62
Aguada.....	691.45	3,080.89	1,453.65	491.75	13,847.74
Aguadilla.....	1,505.43	5,945.75	4,584.50	331.03	33,066.27
Agua Buenas.....	163.14	1,334.84	494.71	108.87	7,994.54
Albionito.....	82.50	6,564.33	4,745.97	1,068.99	22,413.55
Añasco.....	76.00	4,063.62		421.90	14,424.34
Arecibo.....	33,860.54	18,876.04	6,739.34	1,792.48	106,667.35
Arroyo.....	2,320.62	5,045.19	1,167.08	413.24	15,824.75
Barceloneta.....	579.26	4,673.72	874.39	195.80	16,951.48
Barranquitas.....	532.87	1,816.18		10.80	5,441.53
Barros.....	26.25	2,234.49	126.65	30.60	6,008.82
Bayamon.....	450.50	14,866.71	1,083.30	2,512.26	42,200.76
Cabo Rojo.....	305.56	3,826.15	1,858.81	147.03	17,707.80
Caguas.....	4,408.44	15,937.07	5,978.13	1,987.27	64,979.50
Camuy.....	427.63	4,136.85	546.70	402.26	13,120.07
Carolina.....	246.07	3,906.67	1,707.42	860.62	19,784.56
Cayey.....	951.07	9,045.86	2,811.18	1,680.02	31,656.11
Caiba.....	513.32	901.90	495.77	203.31	5,013.30
Ciales.....	1,225.56	3,299.01	764.30	663.51	15,716.84
Cikra.....	214.17	2,631.21	920.89	181.33	8,441.70
Coamo.....	75.32	3,342.89	1,419.96	482.06	17,868.75
Comerio.....	806.92	3,242.88	1,692.84	886.10	19,431.29
Corozal.....	149.97	1,092.07	566.44	309.28	7,108.36
Dorado.....	207.81	1,728.90	951.37	208.23	8,703.13
Fajardo.....	163.50	7,207.86	2,696.54	1,538.29	38,086.92
Guanica.....	2,088.60	4,375.07	2,610.57	1,215.97	22,404.51
Guayama.....	6,050.98	18,723.60	5,496.59	4,032.34	57,787.40
Guayanilla.....	484.87	3,517.57	957.97	337.83	15,994.76
Guaynabo.....	309.36	1,715.61	1,531.17	653.87	8,011.81
Gurabo.....	361.97	3,457.90	1,365.81	310.47	14,108.46
Hatillo.....	16.50	2,063.97	512.05	117.86	8,361.90
Hormigueros.....	54.90	1,019.25	554.49	553.51	6,747.82
Humacao.....	2,176.99	21,190.82	138.59	2,003.74	57,155.69
Isabela.....		3,321.41	737.31	153.74	10,953.60
Jayuya.....	211.10	704.53	340.25	378.46	7,356.83
Jauna Diaz.....	352.58	5,640.95	2,086.88	513.66	18,425.71
Juncos.....	672.35	4,862.37	2,268.97	706.68	23,725.68
Lajas.....	107.08	4,431.22	750.22	297.20	14,157.85
Lares.....	2,994.77	6,373.61	2,742.97	332.07	25,767.90
Las Marias.....	207.93	2,301.82	1,126.67	160.76	10,206.75
Las Piedras.....	70.63	1,507.42	277.74	62.45	5,244.27
Loiza.....	736.57	5,394.38	1,061.34	194.94	25,428.46
Luquillo.....	100.97	1,697.18	308.67	273.24	6,002.22
Manati.....	765.42	7,665.12	1,292.12	676.80	31,573.82
Maricao.....	620.24	3,046.17	512.75	360.26	11,407.87
Mannabo.....	202.58	1,916.94	536.69	252.96	8,479.52
Mayaguez.....	4,466.20	41,291.49	5,241.40	5,389.48	103,440.13
Moca.....	192.93	2,120.68	91.10	136.08	6,055.76
Morovis.....	171.67	2,429.15	582.17	70.70	7,243.49
Naguabo.....	98.63	3,144.80	1,904.69	1,373.38	19,665.25
Naranjito.....	86.18	572.38	197.73	95.18	3,319.65
Patillas.....	497.08	4,273.56	718.85	254.25	12,925.19
Penuelas.....	1,047.01	1,730.40	485.43	776.27	10,267.38
Ponce.....	24,409.58	74,452.95	975.50	4,390.12	292,709.01
Quebradillas.....	173.41	1,523.06	675.03	231.48	6,676.35
Rincon.....	282.43	1,922.60	618.25	191.16	6,769.88

TABLE 2.—Statement of disbursements of the various municipalities of Porto Rico for the fiscal year ending June 30, 1918—Continued.

Municipalities.	Purchases of unexpendable property.	Purchases of supplies.	Wages and per diems.	Miscellaneous.	Total.
Rio Grande.....	\$81.25	\$3,413.66	\$1,816.71	\$273.36	\$15,551.87
Rio Piedras.....	634.25	13,794.34	667.79	291.55	60,425.87
Sabana Grande.....	155.49	2,068.23	506.45	139.68	7,348.80
Salinas.....	8,308.58	7,575.32	1,060.14	401.56	37,124.06
San German.....	560.09	7,166.68	2,014.53	539.24	31,887.96
San Juan.....	189,815.66	265,029.53	47,746.45	115,482.16	874,784.82
San Lorenzo.....	427.69	2,515.86	533.50	417.38	15,896.67
San Sebastian.....	556.22	4,024.13	2,059.36	597.67	18,024.90
Santa Isabel.....	455.28	4,135.38	1,239.20	362.77	15,252.92
Tos Alta.....	2,043.28	1,552.75	442.15	292.85	9,646.87
Tos Baja.....	1,878.50	2,591.97	1,188.59	220.73	15,197.18
Trujillo Alto.....	41.25	1,182.76	550.37	99.40	6,400.25
Utua.....	1,870.45	5,161.85	2,640.18	530.96	25,940.27
Vega Alta.....	96.00	2,517.16	359.86	314.09	10,699.30
Vega Baja.....	388.45	7,390.39	1,061.49	342.28	19,348.04
Vieques.....	321.55	5,586.52	3,327.47	1,048.23	24,379.38
Villalba.....	204.59	733.25	147.62	49.25	3,232.79
Yabucoa.....	345.83	8,329.97	1,243.15	592.46	30,288.00
Yauco.....	480.85	7,761.83	6,286.74	1,067.24	42,031.93
Total.....	309,041.81	723,434.48	158,468.05	168,212.07	2,688,965.97

This table shows the disbursements of the various municipalities during the year to have been \$2,688,965.97. This sum, however, should not be considered as the total expenses or cost of operation of the various municipalities, as the amount of \$309,041.81 appearing under the heading "Purchase of unexpendable property" can not be considered as a charge to operation, for the reason that such purchases represent articles that will be used by the municipalities for many years and of which a strict accountability will be required by this office in accordance with the rules and regulations promulgated. The following table relates to the unexpendable property of the municipalities:

TABLE 3.—Statement of unexpendable property owned by the municipalities of Porto Rico, as of June 30, 1918.

Municipalities.	Value of property reported as per first inventory.	Increase during year.	Decrease during year.	Balance June 30, 1918.
Adjuntas.....	\$6,319.97	\$66.05	.....	\$6,386.02
Aguada.....	7,434.45	127.00	.....	7,561.45
Aguadilla.....	48,134.45	.....	.....	48,134.45
Agua Buenas.....	3,895.66	325.60	.....	4,221.26
Albionito.....	2,039.00	52.50	.....	2,091.50
Anasco.....	21,394.80	.....	.....	21,394.80
Arecibo.....	166,543.67	33,219.45	.....	199,763.12
Arroyo.....	44,026.10	2,476.56	.....	46,502.66
Barceloneta.....	11,614.74	.....	.....	11,614.74
Barranquitas.....	4,722.66	.....	.....	4,722.66
Barros.....	3,056.65	1.25	.....	3,057.90
Bayamon.....	48,200.15	50.50	\$520.00	47,730.65
Cabo Rojo.....	28,286.74	183.57	146.50	28,333.81
Caguas.....	34,968.03	70,345.04	.....	105,314.07
Camuy.....	12,376.75	390.64	.....	12,767.39
Carolina.....	6,198.95	359.32	30.00	6,528.27
Cayey.....	77,263.93	1,156.42	68.12	78,357.23
Ceiba.....	1,867.98	225.25	.....	2,093.23
Ciales.....	45,537.90	113.16	60.00	45,591.06
Cidra.....	2,817.55	15.70	.....	2,833.25
Coamo.....	80,044.15	117.82	75.98	80,085.99
Comerio.....	28,225.18	448.87	11.00	28,663.05
Corozal.....	4,449.18	151.97	.....	4,601.15
Culebra.....	477.93	.....	.....	477.93
Dorado.....	4,892.90	202.61	109.00	4,986.51
Fajardo.....	132,434.05	330.80	5.00	132,759.85
Guanica.....	19,792.40	2,030.87	.....	21,823.27
Guayama.....	59,771.25	40.65	132.53	59,679.37
Guayanilla.....	21,106.00	.....	.....	21,106.00

TABLE 3.—*Statement of unexpendable property owned by the municipalities of Porto Rico, as of June 30, 1918—Continued.*

Municipalities.	Value of property reported as per first inventory.	Increase during year.	Decrease during year.	Balance June 30, 1918.
Gnaynabo.....	\$589.74	\$312.71	.....	\$902.45
Gurabo.....	40,026.75	369.17	\$15.23	40,380.69
Hatillo.....	4,262.15	16.50	.....	4,268.65
Hormigueros.....	4,988.60	49.05	.....	5,037.65
Humacao.....	213,413.75	2,296.86	106.95	215,603.66
Isabela.....	10,365.40	.....	.....	10,365.40
Jayuya.....	379.50	211.10	.....	590.60
Juana Diaz.....	33,009.60	100.70	97.72	33,012.58
Juncos.....	64,186.58	1,177.45	.....	65,364.03
Lajas.....	19,867.88	144.33	12.50	19,999.69
Lares.....	21,902.25	604.63	.....	22,506.88
Las Marias.....	5,127.04	119.08	.....	5,246.12
Las Piedras.....	2,470.80	.....	.....	2,470.80
Loiza.....	30,223.67	359.86	.....	30,583.53
Luquillo.....	1,157.62	60.97	.....	1,218.59
Manati.....	16,122.00	437.54	.....	16,559.54
Maricao.....	29,056.65	404.18	.....	29,550.83
Maunabo.....	15,071.26	196.76	19.69	15,248.33
Mayaguez.....	332,335.72	.....	.....	332,335.72
Moca.....	2,846.15	515.53	300.00	3,061.68
Morovis.....	3,265.25	.....	.....	3,265.25
Naguabo.....	11,032.77	94.80	27.00	11,100.57
Naranjito.....	1,671.30	80.50	32.00	1,719.80
Patillas.....	23,345.63	.....	.....	23,345.63
Pedraza.....	18,394.35	258.53	125.50	18,527.38
Ponce.....	2,047,084.81	.....	.....	2,047,084.81
Quebradillas.....	5,655.29	63.41	.....	5,718.70
Rincon.....	8,856.52	282.43	5.75	9,133.20
Rio Grande.....	8,323.25	19.75	.....	8,343.00
Rio Piedras.....	54,689.16	352.85	120.00	54,922.01
Sabana Grande.....	3,823.95	19.30	.....	3,843.25
Salinas.....	42,970.11	8,338.08	.....	51,308.19
San German.....	47,968.13	574.24	.....	48,542.37
San Juan.....	705,623.42	3,965.42	1,977.72	707,611.12
San Lorenzo.....	13,427.35	33.00	.....	13,460.35
San Sebastian.....	44,329.53	728.18	84.27	44,973.44
Santa Isabel.....	13,813.09	441.48	137.00	14,117.57
Toa Alta.....	6,833.64	1,629.50	.....	8,463.14
Toa Baja.....	6,675.85	378.50	.....	7,054.35
Trujillo Alto.....	3,732.90	41.25	.....	3,774.15
Utusado.....	53,161.55	327.71	1.75	53,487.51
Vega Alta.....	15,310.76	61.60	55.34	15,317.01
Vega Baja.....	20,251.63	302.23	201.90	20,351.96
Vieques.....	60,143.99	487.80	120.60	60,511.19
Villalba.....	71.25	67.00	.....	138.25
Yabucoa.....	55,023.21	400.00	13.49	55,409.72
Yauco.....	150,124.63	539.05	15.00	150,648.68
Total.....	5,200,899.77	139,474.63	4,622.54	5,335,751.86

In accordance with the rules and regulations governing unexpendable property, property clerks were appointed in the 76 municipalities of the island and all have submitted inventories of the property owned by their respective municipalities. The total property owned by the municipalities as shown by the table is \$5,335,751.86.

All purchases of property are reported to this office at the end of each month, and the proper accounts set up in order that at any future time the property can be located. The property clerks are responsible for all proper under their custody and no property is allowed to be dropped from their accounts without the previous authorization from this office after the property has been inspected for the purpose of ascertaining its actual condition.

The accounting of property being entirely new to the municipal officials, it has been rather difficult to obtain from them reports in proper form and at the time specified by the rules and regulations, but the success already obtained indicates that this line of municipal accounting will in the end more than compensate the efforts spent in accomplishing it. At all times the municipal officials have declared the system of property accounting an excellent innovation, tending toward the honest operation of municipalities.

TABLE 4.—Statement of receipts and disbursements of the various school boards of Porto Rico for the fiscal year ending June 30, 1918.

## RECEIPTS.

School boards.	Balance July 1, 1917.	Proceeds from loans.	School funds.	School tax.	Interest on bank balances.	Miscellaneous.	Total.
Adjuntas.....	\$2,198.70		\$3,805.75	\$1,926.22	\$63.75		\$7,994.42
Aguada.....	2,778.39		3,885.32	2,130.31	65.61		8,861.87
Aquedilla.....	1,245.07		4,384.11	2,513.63	48.65	\$2.34	8,191.36
Agua Buenas.....	1,270.55		1,034.94	817.83	10.16		2,133.18
Albionito.....	591.63		2,300.39	1,391.63	24.44	11.36	4,319.75
Añasco.....	440.26		3,926.81	2,259.91	25.69	11.60	6,664.27
Arecibo.....	9,497.37		16,761.61	10,190.86	179.78	51.22	36,680.84
Arroyo.....	1,747.19		3,035.36	674.49	17.73	9.27	5,484.04
Barceloneta.....	9,930.38		4,604.24	2,833.55	232.54		17,600.71
Barranquitas.....	958.30		1,121.26	667.81	25.75	5.64	2,778.76
Barros.....	711.16		1,768.24	1,079.12	19.24	.82	3,578.88
Bayamon.....	1,264.66		5,803.91	2,579.46	21.17	7.72	9,676.92
Cabo Rojo.....	2,179.98		4,529.69	2,721.67	86.79	139.49	9,667.62
Caguas.....	1,932.24		9,289.23	6,151.21	98.75	2.40	17,473.83
Camuy.....	4,943.24		3,606.49	1,984.83	173.16		11,637.72
Carolina.....	1,490.88		5,148.73	2,490.86	44.55	5.03	9,180.06
Cayey.....	1,562.97	\$30,000.00	5,945.23	3,164.88	106.05	17.90	40,796.63
Ceiba.....	2,016.07		1,214.40	539.72	36.94	12.00	3,819.13
Ciales.....	810.73		3,555.45	2,037.76	23.49	1.76	6,429.19
Cidra.....	582.74		1,656.04	1,037.46	24.90		3,301.14
Coamo.....	2,625.82		3,733.46	1,996.15	68.70	14.00	8,338.13
Comerio.....	802.80		4,409.26	2,108.02	23.74	8.63	7,352.45
Corozal.....	34.38		1,208.76	791.29	9.31	196.00	2,239.74
Dorado.....	4,487.09		2,429.96	1,497.49	103.00		8,517.54
Fajardo.....	2,656.59		7,096.74	3,154.02	45.81	12.96	12,906.12
Guanica.....	6,932.68		3,159.02	1,408.99	99.09	1.64	11,339.42
Guayama.....	394.63		8,383.64	4,070.62	20.67	196.00	13,067.56
Guayanilla.....	1,236.00		3,873.96	2,024.67	47.93		7,182.56
Guaynabo.....	410.12		2,000.77	1,184.79	14.75	2.50	3,612.93
Guarbo.....	224.10		2,717.99	1,525.64	22.86	18.17	4,506.66
Hatillo.....	425.53		2,099.04	2,215.12	13.31	2.92	4,755.92
Hormigueros.....	3,506.23		1,895.14	1,138.25	116.15		6,654.77
Humacao.....	704.02		6,164.39	3,961.81	25.87	50.00	10,906.09
Isabela.....	671.30		2,574.26	1,486.68	26.24	6.24	4,764.72
Jayuya.....	1,584.42		2,014.23	1,400.87	42.61	25.96	5,065.09
Juana Diaz.....	4,762.75		5,114.08	3,133.42	126.71		13,136.96
Juncos.....	164.56		3,531.69	2,222.91	17.55	189.66	6,126.37
Lajas.....	274.67		3,870.96	2,309.07	35.78		6,390.48
Lares.....	2,786.33		5,166.27	2,737.88	67.85	4.62	10,762.95
Las Marias.....	4,438.80		3,285.92	1,569.57	96.80		9,391.09
Las Piedras.....	2,542.79		1,804.12	1,045.52	54.80	20.00	5,467.23
Loiza.....	4,553.89		5,367.02		109.09	25.00	10,068.00
Luquillo.....	770.63		1,564.29	696.19	18.24		3,048.35
Manati.....	1,316.46		5,636.42	3,527.19	57.60	49.70	10,527.37
Maricao.....	1,661.47		3,094.19	1,600.83	35.28	380.00	6,751.77
Maunabo.....	905.52		1,712.06	1,026.77	29.19		3,673.54
Mayaguez.....	31,075.96		12,698.86	9,463.13	655.05	64.31	53,967.31
Moca.....	490.10		1,952.13	1,003.07	18.36		3,463.66
Morovis.....	361.25		1,534.74	940.74	13.36	.03	2,850.12
Naguabo.....	754.77		3,990.05	1,961.55	7.73	5.00	6,719.10
Naranjito.....	446.20		796.90	533.08	16.78	60.00	1,842.86
Pailillas.....	2,495.88		3,035.96	1,909.73	66.80	3.23	7,511.60
Peñuelas.....	228.05		2,454.14	1,349.16	17.85	2.79	4,051.99
Ponce.....	1,352.34		24,103.98	15,170.67	79.79	177.12	53,883.80
Quebradillas.....	162.52		1,667.57	1,032.91	18.79	21.83	2,903.62
Rincon.....	569.86		1,658.28	1,126.08	18.19	.38	3,373.39
Rio Grande.....	1,075.76		3,490.89	2,103.61	41.41	2.59	6,714.16
Rio Piedras.....	9,539.26		9,995.87	5,418.96	87.83	190.00	25,531.92
Sabana Grande.....	145.80		1,438.64	950.46	12.69		2,547.69
Salinas.....	6,289.36		9,465.85	4,207.02	194.89	15.00	20,172.12
San German.....	3,531.23		5,251.14	3,091.38	80.94		11,954.69
San Juan.....	331,581.86		69,698.76	37,233.74	8,067.06	95.69	446,697.11
San Lorenzo.....	491.03		1,951.43	1,305.39	20.55	2.75	3,771.15
San Sebastian.....	4,631.84		4,482.57	2,083.01	92.39		11,269.81
Santa Isabel.....	8,050.19		6,138.56	2,967.79	153.74	.15	16,310.63
Toca Alta.....	1,595.48		1,632.37	1,085.14	42.55	.10	4,305.64
Toca Baja.....	3,155.42		4,390.06	2,468.10	79.15	7.19	10,089.92
Trujillo Alto.....	1,053.11		2,151.59	1,265.25	42.49		5,103.44
Utusado.....	4,428.74		6,472.43	3,162.79	79.55	46.43	14,189.94
Vega Alta.....	2,078.94		2,786.34	1,701.63	46.03	.40	6,623.34
Vega Baja.....	638.22		4,509.65	2,615.65	41.66	5.25	7,929.88
Vieques.....	10,168.63	119.54	6,318.25	3,874.37	270.24	82.30	20,713.79
Villaalba.....			1,194.89	763.21	9.05		1,967.15
Yabucoa.....	1,607.04		4,744.90	3,410.11	55.40	2.03	9,819.48
Yauco.....	347.85		5,910.60	3,265.85	15.11	60.00	9,599.41
Total.....	528,014.49	30,119.54	396,202.14	219,215.75	12,963.30	2,299.12	1,188,804.34

TABLE 4.—Statement of receipts and disbursements of the various school boards of Porto Rico for the fiscal year ending June 30, 1918—Continued..

## DISBURSEMENTS.

School boards.	Salaries.	Rent of school houses.	Purchases of unexpended property.	Purchases of supplies.	Miscellaneous.	Total.
Adjuntas.....	\$1,240.29	\$1,950.00	\$244.99	\$418.47	\$646.21	\$4,499.96
Agüeda.....	1,512.26	1,290.71	1,341.93	1,379.55	715.08	6,139.53
Agüadilla.....	1,192.44	1,488.00	1,615.31	511.22	1,816.74	5,623.71
Agua Buenas.....	1,265.08	324.00	268.17	141.98	380.97	1,890.20
Alfonito.....	554.30	795.00	218.39	371.50	1,272.70	3,212.89
Añasco.....	1,153.65	1,351.00	515.95	626.05	807.08	4,453.76
Arrecibo.....	5,257.22	2,113.50	12,124.39	4,685.75	3,945.00	30,125.96
Arroyo.....	6,789.91	1,224.00	782.89	593.82	349.33	7,739.95
Barcelona.....	1,461.38	1,964.00	5,011.58	290.44	541.64	9,269.04
Barranquitas.....	332.54	464.00	926.24	164.79	140.32	2,027.89
Barros.....	640.43	764.00	668.46	188.98	417.85	2,679.72
Bayamon.....	1,523.16	2,988.50	609.26	1,119.89	1,046.12	7,286.93
Cabo Rojo.....	1,539.96	3,198.00	1,217.86	927.66	562.93	7,446.31
Caguas.....	2,807.15	5,988.50	2,248.71	2,134.64	2,016.45	15,195.45
Camuy.....	1,126.71	285.00	2,082.60	1,636.80	2,063.29	7,194.40
Carolina.....	1,483.25	1,725.50	1,075.13	882.90	1,982.81	7,149.59
Cayey.....	1,383.63	2,836.00	30,567.30	258.55	3,227.59	38,273.07
Ceiba.....	264.74	1,020.00	368.55	138.92	355.33	2,147.54
Ciales.....	762.07	1,699.34	1,296.97	430.27	1,449.48	5,638.13
Cidra.....	244.62	1,152.00	66.42	149.37	550.60	2,161.01
Coamo.....	789.26	2,410.00	505.92	592.50	433.92	4,731.60
Comerio.....	1,267.11	1,037.50	640.71	973.25	844.27	4,762.84
Corozal.....	298.17	180.00	83.75	389.96	705.25	1,657.13
Cotui.....	357.68	1,268.80	24.26	583.24	567.83	2,801.81
Fajardo.....	2,804.39	2,412.00	1,268.30	1,112.32	2,059.13	9,686.14
Guanica.....	2,817.75	890.52	4,293.36	567.70	2,752.48	11,321.81
Guayama.....	2,219.97	3,150.00	2,125.44	1,838.97	1,370.20	10,704.58
Guayanilla.....	1,226.26	1,188.50	325.03	855.03	1,121.85	4,716.67
Guaynabo.....	435.95	1,236.00	342.27	193.50	501.41	2,709.13
Gurabo.....	684.79	1,830.00	230.81	141.63	1,201.84	4,089.07
Hatillo.....	884.50	402.00	1,029.69	492.15	527.30	3,335.64
Hormigueros.....	482.32	796.00	36.55	94.96	149.74	1,611.57
Humacao.....	1,963.39	2,069.25	1,362.18	2,007.35	2,598.59	10,000.76
Isabela.....	533.07	1,305.00	1,229.43	476.80	862.41	4,406.71
Jayuya.....	637.64	1,711.00	504.68	134.86	322.15	3,310.23
Juana Diaz.....	1,730.77	1,113.00	288.88	797.99	1,052.25	4,982.89
Juncos.....	1,268.18	2,610.10	526.84	411.35	1,074.82	5,991.29
Lajas.....	874.91	968.00	1,099.73	287.05	393.93	3,623.62
Lares.....	1,476.14	2,837.00	1,625.92	1,189.43	560.34	7,688.83
Las Marias.....	801.92	1,144.00	1,697.12	613.96	621.61	4,968.61
Las Piedras.....	791.31	946.00	1,122.54	169.74	400.56	3,430.15
Loíza.....	878.44	2,112.00	996.85	716.82	1,185.31	5,889.42
Luquillo.....	536.40	1,272.00	88.90	116.90	266.24	2,080.44
Manati.....	1,692.53	3,012.00	359.81	912.78	648.97	6,626.39
Maricao.....	1,466.93	1,346.00	1,836.80	386.05	1,374.95	6,410.73
Maunabo.....	753.96	678.00	459.65	89.52	968.27	2,954.40
Mayaguez.....	4,640.63	1,336.00	8,800.02	1,461.29	6,432.93	22,670.87
Moca.....	453.73	696.00	143.68	428.16	440.84	2,162.41
Morovis.....	574.61	885.00	611.66	43.70	671.07	2,786.04
Naguabo.....	974.38	1,605.00	731.89	248.93	2,935.62	6,495.82
Naranjito.....	269.62	276.00	116.30	94.22	249.40	995.54
Patillas.....	811.45	1,704.00	1,978.72	410.76	755.20	5,660.13
Penuelas.....	821.69	1,463.00	779.12	403.41	207.39	3,674.61
Ponce.....	7,677.38	5,198.40	4,193.23	1,597.80	31,635.69	50,202.50
Quebradillas.....	455.95	645.00	521.86	418.05	227.41	2,268.27
Rincon.....	785.19	972.00	565.50	189.56	576.21	3,088.46
Rio Grande.....	1,193.54	1,768.00	1,106.95	341.97	626.78	5,037.54
Rio Piedras.....	4,910.07	1,248.00	7,782.20	3,057.87	962.06	17,980.20
Salinas Grande.....	388.31	1,091.00	7.78	175.52	423.10	2,065.71
Salinas.....	3,268.78	906.00	8,236.47	124.96	930.13	15,485.34
San German.....	1,918.73	1,873.75	1,935.45	2,634.44	936.15	9,398.53
San Juan.....	14,536.00	7,182.00	230,453.30	5,157.51	46,762.45	304,121.26
San Lorenzo.....	364.77	1,366.00	840.13	35.95	391.79	2,628.64
San Sebastian.....	1,065.82	2,063.00	2,856.31	262.80	1,019.54	7,267.47
Santa Isabel.....	2,767.40	116.00	5,875.47	930.39	589.97	10,279.23
Tea Alta.....	553.44	325.00	1,167.46	248.52	567.42	2,761.84
Tea Baja.....	1,438.39	1,460.00	2,367.64	479.69	1,918.27	7,682.99
Trujillo Alto.....	507.43	806.00	188.23	419.76	547.73	2,471.15
Utledo.....	1,660.00	3,039.81	2,932.37	543.14	2,810.09	10,985.41
Vega Alta.....	1,109.34	630.00	1,408.34	540.47	1,101.72	4,789.87
Vega Baja.....	1,113.36	1,592.00	672.20	516.76	2,053.20	5,947.52
Vieques.....	1,642.93	1,032.00	5,375.67	1,382.04	586.54	10,019.06
Villalba.....	58.23	858.00	.....	4.16	221.50	1,141.89
Yabucoa.....	2,261.69	3,045.50	895.55	1,532.48	701.03	8,436.25
Yauco.....	2,077.14	1,666.00	1,731.71	997.67	1,762.43	8,234.95
Total.....	115,112.83	122,331.18	381,927.58	58,673.52	157,896.80	835,942.91

This table shows the receipts and disbursements of the various school boards as reported to this office by the different treasurers of the boards.

Due to the fact that all of these officials, with the exception of the treasurers, serve in their respective positions without compensation, it has been more difficult to obtain from them, at the proper time, the necessary reports, and the only weapon which this office can use in order to obtain results is to convince the officials of the benefits accruing to their respective organizations from the system established for the accounting of funds and property. This has obtained the desired results in every case where it has been possible for this office to come into personal contact with the officials, and during the next year the efforts of the office will be directed toward that end.

The total receipts of all school boards during the year, including the balance at the beginning of the year, have been \$1,188,804.34 and the disbursements \$835,942.91, leaving a balance in the various treasuries as of June 30, 1918, of \$352,861.43. The school board of Bayamon, however, has submitted reports for only seven months of the entire year.

TABLE 5.—*Statement of unexpendable property owned by the school boards of Porto Rico as of June 30, 1918.*

School boards.	Value of property reported as per first inventory.	Increase during year.	Decrease during year.	Balance June 30, 1918.
Adjuntas.....	\$20,632.91			\$20,632.91
Aguada.....	18,819.52			18,819.52
Aguadilla <sup>1</sup> .....				
Agua Buenas.....	7,710.90	\$6.00		7,716.90
Albionito.....	19,016.02	216.89		19,232.91
Añasco <sup>1</sup> .....				
Arecibo.....	145,910.13			145,910.13
Arroyo.....	20,354.35	782.89		21,137.24
Barceloneta.....	9,706.05	662.73		10,368.78
Barranquitas.....	13,233.90			13,233.90
Barros.....	14,966.12	668.46		15,634.58
Bayamon <sup>1</sup> .....				
Cabo Rojo <sup>1</sup> .....				
Caguas.....	46,316.42			46,316.42
Camuy.....	25,650.59			25,650.59
Carolina.....	25,944.95	256.25		26,201.20
Cayey.....	26,298.32			26,298.32
Celba.....	2,344.55	18.00		2,362.55
Ciales.....	17,047.59	1,623.31		18,670.90
Cidra <sup>1</sup> .....				
Coamo.....	31,957.53			31,957.53
Comerio.....	17,749.27	408.60		18,157.87
Corozal.....	12,147.34			12,147.34
Culebra <sup>1</sup> .....				
Dorado <sup>1</sup> .....				
Fajardo.....	43,971.58	1,298.30		45,269.88
Guanica.....	18,612.35	2,926.40		21,538.75
Guayama.....	52,585.70			52,585.70
Guayanilla.....	17,454.10	324.43		17,778.53
Guayanabo.....	3,417.20	681.42		4,098.62
Gurabo.....	8,016.04			8,016.04
Hatillo.....	13,180.70			13,180.70
Hormigueros.....	1,452.61	31.20		1,483.81
Humacao <sup>1</sup> .....				
Isabela <sup>1</sup> .....				
Jayuya.....	2,329.68	504.68		2,834.36
Juana Diaz.....	52,152.54			52,152.54
Juncos.....	13,357.27			13,357.27
Lajas.....	26,225.91	964.75		26,190.66
Lares.....	18,378.07	1,608.87		19,986.94
Las Marias <sup>1</sup> .....				
Las Piedras.....	5,719.07	774.10		6,493.17
Loiza.....	14,847.97	107.38		14,955.35
Luquillo.....	2,348.19	493.50	6.00	2,835.69
Manati.....	32,295.10			32,295.10
Maricao.....	19,257.75			19,257.75
Maunabo.....	9,574.12	6.15		9,580.27
Mayaguez.....	165,397.59			165,397.59
Moca.....	10,500.40	108.64		10,609.04
Morovis.....	4,766.55			4,766.55
Naguabo.....	26,985.00	218.86		27,204.46
Naranjito.....	4,527.85	116.30		4,644.15
Pailitas <sup>1</sup> .....				

<sup>1</sup> No reports submitted.

TABLE 5.—*Statement of unexpendable property owned by the school boards of Porto Rico as of June 30, 1918—Continued.*

School boards.	Value of property reported as per first inventory.	Increase during year.	Decrease during year.	Balance June 30, 1918.
Peñuelas.....	\$7,011.74	\$6.85		\$7,018.59
Ponce <sup>1</sup> .....				
Quebradillas <sup>1</sup> .....				
Rincón.....	10,048.55	450.20		10,498.75
Río Grande.....	31,283.26	1,062.85		32,346.11
Río Piedras.....	70,011.96			70,011.96
Sabana Grande.....	17,287.91			17,287.91
Salinas <sup>1</sup> .....				
San German.....	37,164.57	1,126.00		38,290.57
San Juan.....	583,963.44	19,330.50		603,313.94
San Lorenzo.....	11,376.04			11,376.04
San Sebastian.....	15,139.49	2,217.20		17,356.69
Santa Isabel.....	40,004.77	1,255.75		41,260.52
Toa Alta.....	17,307.46			17,307.46
Toa Baja.....	14,388.50			14,388.50
Trujillo Alto.....	6,551.15	175.85		6,727.00
Utuado.....	34,213.80			34,213.80
Vega Alta.....	14,002.80	1,405.34		15,408.14
Vega Baja <sup>1</sup> .....				
Vieques.....	36,943.10	5,476.84	\$156.50	42,263.44
Villalba.....	153.46			153.46
Yabucoa.....	22,263.50	895.50		23,159.00
Yauco.....	60,588.97			60,588.97
Total.....	2,071,894.96	48,270.99	162.50	2,119,993.45

<sup>1</sup> No reports submitted.

This table shows the result of the property accounting system installed for the school boards.

The total property owned by the various school boards, as shown by reports submitted to June 30, 1918, amounts to \$2,119,993.45, but many of the boards have not yet rendered their first inventory while others have sent in reports which were found to be incomplete. It is the intention of this office to have full and complete reports available for the next annual report, at which time an effective control over all property purchased by the school boards will have been established.

The accounting regulations which were in use by the municipalities at the time this office took over the supervision of their accounts were continued in force during the past year, but new regulations have now been prepared and it is hoped to have them ready to put into operation by October 1.

The auditor has had the pleasure of conferring with the officials of many of the municipalities and school boards on matters in connection with their offices and has rendered opinions to many officials who have requested them for their guidance.

In addition to the work in connection with the municipalities and school boards, the division of audits also has charge of the audit and settlement of the accounts of the collectors of internal revenue, of which there were 66, and of the accounts of the stamp agents—who are appointed for the sale of internal revenue stamps in towns where there are no collectors—of which there were 8 submitting monthly accounts.

#### DIVISION OF EXAMINATIONS.

Owing to the difficulty in keeping the staff of examiners at its full strength during the entire fiscal year 1917-18, this division, as in previous years, has been greatly handicapped in carrying on its work. Of the nine positions of examiners and traveling inspectors with which this division was equipped, only three could be kept permanently filled throughout the year. One position of examiner was assigned to the division of general accounts, and there occurred six changes in the other positions, due to resignations. Two of the employees of this division who resigned during the year, after having received the required training in the first and second officers' training camps, were awarded their commissions as second and first lieutenant, respectively, of the United States Army, and the other four accepted positions outside of this office. Early in July, 1918, one of the most efficient of the examiners also tendered his resignation in order to enter the third officers' training camp.



In addition to these continuous changes in the examining force, due to lack of personnel in previous years, the examination made of certain offices during fiscal year 1917-18 necessarily had to cover usually long periods, sometimes as long as three and one-half years, and consequently considerable more time than is ordinarily required had to be spent in said examinations.

In spite of the above difficulties, fiscal year 1917-18 has been one of great activity and of marked success for the division of examinations not only in the amount of work dispatched but also in the number of important cases handled.

During fiscal year 1917-18, the following examinations were made by this division: Seventy municipalities; 3 district courts; 13 municipal courts; 13 school boards; 66 offices of collectors of internal revenue; 8 offices of internal-revenue stamp agents; University of Porto Rico; captain of the port, Humacao; Antituberculosis League of Porto Rico; receiving officer, insane asylum; telegraph office, Ensenada.

The 66 offices of collectors of internal revenue and the 8 offices of internal-revenue stamp agents were examined twice during the year. Due to the appointment of the new treasurer of Porto Rico on September 8, 1917, the examiners of this division made also a complete examination and took an inventory of all revenue stamps and securities in the hands of the treasurer of Porto Rico and of the bonds pledged and unpledged in deposit with the Royal Bank of Canada and the American Colonial Bank. This work required three weeks' time, and it was necessary in order to properly transfer the office from the outgoing treasurer to the new treasurer.

In addition to the above examinations, this division made several special investigations which had been intrusted to this office.

Special attention was given during fiscal year 1917-18 to the examination of the municipalities which included exhaustive tests of their sources of income. The good results of said examinations are being felt by improvements in the management of municipal affairs.

Several municipalities which were not paying due attention to the collection of their revenue have through proper management considerably increased their income. This increase in revenue, in conjunction with better administration of their expenses, has permitted the municipalities, in some cases, to provide more adequately than heretofore for the municipal services and, in other cases, to provide for needs which had been completely disregarded. It is obvious to state that the personal instructions given by the examiners to the municipal officials, as well as the recommendations made by the examiners in their reports, have greatly contributed to the improvements noted.

All cases of official misconduct have been energetically handled by this division, and when conditions so required the cases were promptly turned over to the department of justice.

In one of the municipalities examined, the jailer was found to have been padding for a long time the daily list of allowances to prisoners for subsistence, thereby defrauding the municipality. Upon trial at court, the jailer was convicted and sentenced to serve a term of six months in jail.

In one case it was disclosed that a high municipal official in collusion with an employee of the municipality was embezzling municipal funds by padding laborer's pay rolls. Prosecution of the delinquent parties resulted in fines being imposed of \$500 and \$100, respectively.

The examination of the accounts of one of the pilots acting as captain of the port disclosed that he had embezzled moneys covering lighter license fees received by him in his official capacity. Prosecution was instituted against him and, having plead guilty, he was sentenced to serve a term in jail.

The findings of the examiners in the above cases were so complete and the documents and other evidence turned over to the district attorneys were so clear and comprehensive that the indictments were easily prepared and speedy trials resulted.

In other cases of official misconduct, the charges preferred by the examiners were referred to the proper authorities and, as a result, several of the delinquent officials were removed.

A detailed examination of the accounts of the University of Porto Rico was made covering a period of three years and eight months. The examiner submitted a complete report of his findings, numerous valuable recommendations were made therein in the interest of good administration and correct accounting, and the property accounts were adjusted to agree, for the first time, with the inventories and the accounts in the division of general accounts of this office.

The examination of the accounts of the school boards was begun in the latter part of the fiscal year and has been kept up steadily ever since.

## DIVISION OF PROPERTY ACCOUNTS.

One hundred and two property clerks rendered reports directly to this office during the fiscal year.

The record value of unexpendable property standing charged against all offices rendering property accounts amounts in all to \$1,621,588.67 as of June 30, 1918.

No change has been made in property accounting regulations during the year.

As a general thing, it is believed that the property as reported is correct, but events have proved that upon transferring an account from a property clerk to his successor various discrepancies come to light. This could be avoided to a great extent if an examination and check of the property in every branch were made once a year at least. This with the present force is impracticable, and it is therefore recommended that a position of traveling property inspector at a salary of not less than \$1,800 per annum be created.

TABLE 6.—*Balances of property returns as of June 30, 1918.*

Agriculture and labor, office.....	\$2,956.09
Office of the auditor.....	8,985.15
Blind asylum.....	4,438.24
Boys' charity school.....	19,447.63
Bureau of agriculture.....	2,442.66
Bureau of labor.....	1,344.40
Bureau of translations.....	3,067.36
Civil-service commission.....	2,829.18
Culebra Island.....	508.98
Department of education, books.....	\$384,129.44
Department of education, property.....	89,833.32
	473,932.76
Board of examiners.....	863.60
Executive secretary.....	23,074.58
Insular experimental station.....	11,063.94
Executive mansion.....	6,666.38
Finance department.....	34,579.65
Food commission.....	3,050.61
Girls' charity school.....	6,306.98
Office of the governor.....	9,572.65
San Juan Harbor Board.....	1,776.06
Department of health, books.....	2,625.17
Department of health, property.....	67,458.88
	70,084.05
House of representatives, books.....	1,399.51
House of representatives, property.....	7,141.96
	8,541.46
Insane asylum.....	9,617.57
Department of the interior.....	249,865.46
Porto Rico irrigation service.....	99,587.53
Carnegie Library.....	21,086.30
National Guard.....	770.12
Insular police department.....	63,609.93
Public-service commission.....	2,173.97
Secretary-reporter, supreme court, books.....	37,686.50
Secretary-reporter, supreme court, property.....	1,626.03
	39,312.53
Senate of Porto Rico.....	4,500.28
Bureau of insular telegraph.....	26,518.58
Institute of tropical medicine and hygiene.....	6,675.47
University of Porto Rico, Rio Piedras:	
Books.....	14,211.06
Property.....	37,839.23
	52,050.29
University of Porto Rico, Mayaguez:	
Books.....	7,890.80
Property.....	55,977.99
	63,847.79
Bureau of weights and measures.....	8,947.26
Workman's relief commission.....	536.49
Office of the attorney general.....	32,629.00
Supreme court, books.....	37,858.22
Supreme court, property.....	9,193.03
	47,051.25
District courts:	
Aguadilla.....	5,807.49
Arecibo.....	5,503.94
Guayama.....	6,859.73
Humacao.....	6,498.71
Mayaguez.....	6,148.81
Ponce.....	7,563.14
San Juan.....	9,303.08
Municipal courts:	
Adjuntas.....	574.99
Aguadilla.....	832.11
Añasco.....	501.91
Arecibo.....	970.10

TABLE 6.—*Balance of property returns as of June 30, 1918—Continued.***Municipal courts—Continued.**

Barros.....	\$662.63
Bayamon.....	1,425.22
Cabo Rojo.....	621.23
Caguas.....	635.99
Camuy.....	550.29
Carolina.....	629.01
Cayey.....	734.74
Ciales.....	530.56
Coamo.....	465.76
Fajardo.....	607.18
Guayama.....	863.61
Humacao.....	750.11
Juana Diaz.....	549.65
Lares.....	402.86
Manati.....	785.10
Mayaguez.....	760.27
Patillas.....	486.96
Ponce.....	1,539.53
Rio Grande.....	535.64
Rio Piedras.....	541.33
Salinas.....	642.83
San German.....	662.48
San Juan.....	1,674.02
San Lorenzo.....	437.95
San Sebastian.....	517.34
Utuado.....	885.89
Vega Baja.....	669.05
Vieques.....	562.95
Yabucoa.....	605.62
Yauco.....	633.89
<b>Registries of property:</b>	
Aguadilla.....	613.27
Arecibo.....	882.43
Caguas.....	825.62
Guayama.....	538.02
Humacao.....	714.67
Mayaguez.....	519.72
Ponce.....	709.71
San German.....	495.10
San Juan, section 1.....	1,052.19
San Juan, section 2.....	600.68
<b>District jails:</b>	
Aguadilla.....	737.97
Arecibo.....	1,378.90
Guayama.....	872.25
Humacao.....	1,227.98
Mayaguez.....	1,146.76
Ponce.....	963.30
San Juan.....	966.39
Penitentiary of Porto Rico.....	7,747.29
Reform school.....	8,672.31
<b>Bureau of supplies, printing, and transportation:</b>	
Bureau property.....	\$78,429.55
Surplus property.....	12,156.49
Typewriters.....	3,682.19
	<hr/>
	94,268.23
	<hr/>
	1,621,588.67

**OFFICE FORCE.**

During the year there have been many changes in the personnel of the office. On September 1, 1917, I appointed Mr. P. F. Oakes as assistant auditor to fill the vacancy created by Mr. F. P. McCurdy reassuming the duties of his position as chief of the division of general accounts. Mr. C. A. Richardson resigned as assistant chief of the division of disbursements and claims on March 20, 1918, to accept a lucrative position with the Government of Santo Domingo. The office also lost the services of Mr. R. A. Hernandez, who resigned to accept a position with a local commercial house. In addition to the foregoing, 10 other employees resigned during the year, 3 of whom entered the military service.

It is with great pleasure that I express to the personnel of the office my sincere appreciation of their loyal cooperation in so fully meeting the exacting requirements of the work of the office and in maintaining its usual high standard of efficiency.

Respectfully submitted.

J. W. BONNER,  
*Auditor of Porto Rico.*

The GOVERNOR OF PORTO RICO,  
*San Juan, P. R.*

# CONSOLIDATED FINANCIAL EXHIBITS.

## EXHIBIT 1.—Statement of assets and liabilities as of June 30, 1918:

<b>Current assets:</b>		
Cash in banks (see Exhibit 21).....	\$3,137,861.33	
Remittances in transit (see Exhibit 21).....	461,158.92	
Municipal and school board bonds owned <sup>1</sup> (see Exhibit 9).....	1,744,500.00	
Accounts receivable.....	\$476,770.87	
Less reserve for departmental accounts payable to bureau of supplies.....	61,744.67	
		415,026.20
<b>Bond redemption fund—</b>		
Cash in banks (included in "Cash in banks" above).....	952,725.63	
Taxes paid under protest.....	19,080.68	
Taxes uncollected.....	4,837.64	
Total.....	976,643.95	
Less amortization of premium.....	2,497.83	
		974,146.12
Material and supplies.....	121,953.51	
Delinquent taxes, fiscal years 1901-2 to 1917-18, inclusive, (see Exhibit 19).....	62,276.54	
Deficit of irrigation service from operation under provision of "Temporary irrigation districts".....	42,271.69	
		\$6,959,204.31
<b>Deferred assets:</b>		
Loans to municipalities (see Exhibit 6).....	\$138,269.53	
Less reserve for municipal loan account.....	1,000.00	
		137,269.53
Loans to school boards (see Exhibit 7).....	26,533.23	
School building construction (see Exhibit 8).....	25,255.15	
		189,088.00
<b>Invested assets:</b>		
Road and bridge construction (see Exhibit 10).....	8,437,440.95	
Real estate (see Exhibit 11).....	5,033,668.35	
Public buildings (see Exhibit 12).....	1,736,454.45	
Irrigation works.....	4,808,918.69	
Harbor improvements.....	500,372.15	
Telegraph and telephone lines.....	138,203.38	
Furniture and equipment.....	\$1,370,538.82	
Less reserve for depreciation.....	706,927.70	
		661,611.12
		21,316,669.09
<b>Trust fund reserve account:</b>		
Road bond fund of 1916.....	181,305.30	
Irrigation fund, including \$15,000 loan.....	26,762.94	
Construction of harbor improvements at San Juan.....	3,727.14	
San Juan Harbor fund.....	99,897.85	
Securities, refunding bonds fund.....	1,260,500.00	
Securities, loan fund.....	401,000.00	
		1,973,193.23
<b>Discount on bonds:</b>		
Public improvement bonds.....	35,940.84	
Refunding bonds.....	20,145.42	
		56,086.26
University of Porto Rico (see Exhibit 15).....		343,566.77
Total.....		30,837,897.66
<b>Current liabilities:</b>		
Audited vouchers.....	\$882,071.82	
Unclaimed wages.....	2,029.48	
Franchise deposits.....	226.01	
Bureau of supplies, accounts payable.....	45,755.40	
Notes payable.....	400,000.00	
		1,330,082.71
<b>Deferred liabilities:</b>		
Expenses accrued not paid.....	3,856.28	
Municipalities, tax account.....	37,620.35	
School boards, tax account.....	15,849.87	
Income-tax retention.....	165.87	
Special deposits.....	3,315.63	
		60,807.00
<b>Contingent liabilities:</b>		
Cash bond deposits.....	5,832.94	
Taxes paid under protest.....	318,140.04	
Food commission fund.....	350,000.00	
		673,972.98
Trust fund liabilities (see Exhibit 13).....		3,461,764.80
Bonded debt (see Exhibit 14).....		9,150,000.00
Premium on bonds.....		43,133.08
Trustee, University of Porto Rico (see Exhibit 15).....		343,566.77
Excess of assets over liabilities (see Exhibit 2).....		15,774,568.64
Total.....		30,837,897.66

<sup>1</sup> Carried as cash by treasurer in accordance with act No. 120, approved July 26, 1913.

**EXHIBIT 2.—Account of the people of Porto Rico for the fiscal year ending June 30, 1918.**

Departmental accounts due bureau of supplies, printing and transportation, expenses undistributed.....	\$61,744.67	
Reduction of real estate.....	430,770.48	
Reduction of buildings.....	76,080.55	
Reduction of inventory of miscellaneous property.....	2,165.97	
Public schools donated by the department of education.....	7,982.24	
Surplus of July 1, 1917.....		\$15,750,155.98
Net surplus for current year (see Exhibit 3).....		396,521.57
Net surplus, insular police uniform.....		26.21
Addition to insular bond redemption.....		209,391.95
Sale of insular government property.....		6,536.93
Income of previous years.....		196.42
Sundry adjustments.....		493.49
Excess of assets over liabilities.....	15,774,569.64	
		<u>16,353,322.55</u>
		16,353,322.55

**EXHIBIT 3.—Income account for the year ending June 30, 1918.**

Insular revenues (see Exhibit 4).....		\$5,295,549.31
Insular expenses (see Exhibit 5):		
Current-year expenses.....	\$4,508,387.12	
Depreciation of furniture and equipment, current year.....	145,401.48	
		<u>4,653,788.60</u>
Surplus of current year.....		641,760.71
Reduction of surplus:		
Interest on \$500,000 of 4 per cent road bonds of 1916.....	\$20,000.00	
Interest on \$1,250,000 of 4 per cent refunding bonds, plus amortization....	50,552.00	
Interest on \$1,000,000 of 4 per cent public-improvement bonds, plus amortization.....	41,075.85	
Interest on loans.....	16,830.55	
Expenses of previous years, charged out in current year.....	126,780.65	
		<u>255,239.14</u>
Net surplus.....		396,521.57

**EXHIBIT 4.—Comparative statement of accrued insular revenues for the fiscal years ending June 30, 1918, and June 30, 1917.**

[Not to be confused with cash receipts, Exhibits 22 and 27.]

Source.	Year ending June 30—		Increase.	Decrease.
	1918	1917		
United States internal revenues.....	\$1,039,685.40		\$1,039,685.40	
Customs.....	370,000.00	\$378,000.00		\$8,000.00
Excise taxes.....	1,998,952.16	2,799,868.11		800,915.95
Property taxes, insular proportion.....	658,133.39	634,178.27	23,955.12	
Proportion of municipal income for sanitation.....	119,726.05	121,694.31		1,968.26
Registration of documents.....	94,057.94	87,845.80	6,212.14	
Inheritance taxes.....	52,706.56	34,660.27	18,046.29	
Taxes on insurance premiums.....	30,065.33	24,768.61	5,296.72	
Royalties on franchisees.....	8,833.48	8,276.49	556.99	
Court fees and fines.....	42,067.04	47,415.74		5,348.70
Harbor and dock fees.....	24,376.77	28,134.88		3,758.11
Miscellaneous fees.....	1,992.50	1,811.00	181.50	
Foreign corporation license fees.....	4,075.00	4,100.00		25.00
Rent of property.....	16,063.43	14,564.41	1,499.02	
Telegraph and telephone receipts.....	96,825.98	86,996.17	9,829.81	
Interest on loans to municipalities and school boards.....	81,730.61	78,807.70	2,922.91	
Interest on bank deposits <sup>1</sup> .....	73,446.61	62,518.44	10,928.17	
Canon on mines.....	792.86	792.86		
Income tax.....	566,838.86	409,807.66	157,031.20	
Miscellaneous.....	15,179.34	3,886.51	11,292.83	
	<u>5,295,549.31</u>	<u>4,828,129.23</u>	<u>467,420.08</u>	

<sup>1</sup> Does not include interest on irrigation fund.

**EXHIBIT 5.**—*Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917.*

[Not to be confused with cash disbursements on Exhibit No. 24.]

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
LEGISLATIVE.				
Executive council:				
Salaries.....	\$2,065.58	\$25,481.28		\$23,395.70
Legislative printing.....		1,130.24		1,130.24
Incidentals.....	186.55	936.07		749.52
Postage and freight.....		26.00		26.00
Traveling expenses.....		521.23		521.23
Telegraph and telephone service.....		10.23		10.23
Stationery.....		420.29		420.29
Franchise investigations.....	501.31	3,077.84		2,576.53
Total, executive council.....	2,773.44	31,603.18		28,829.74
House of delegates:				
Salaries.....	1,651.98	27,790.99		26,139.01
Incidentals.....	5.62	1,425.61		1,419.99
Legislative printing.....		1,078.16		1,078.16
Mileage for members.....		374.00		374.00
Total, house of delegates.....	1,657.60	30,668.36		29,011.76
Senate of Porto Rico:				
Salaries.....	27,423.78		\$27,423.78	
Furniture.....	1.00		1.00	
Legislative printing.....	2,503.83		2,503.83	
Incidentals.....	2,975.56		2,975.56	
Compensation to members when in special sessions.....	1,386.00		1,386.00	
Mileage for members.....	575.80		575.80	
Total, Senate of Porto Rico.....	34,865.97		34,865.97	
House of Representatives:				
Salaries.....	40,680.44		4,680.44	
Mileage for members.....	1,412.80		1,412.80	
Legislative printing.....	3,588.36		3,588.36	
Incidentals.....	2,965.20		2,965.20	
Books, furniture, and equipment for library.....	356.00		356.00	
Total, House of Representatives.....	49,002.80		49,002.80	
Miscellaneous legislative:				
Printing and publication of laws.....	101.66	458.98		357.32
Translation bureau—				
Salaries and expenses.....	11,027.02		11,027.02	
Public service commission—				
Salaries and expenses.....	7,223.10		7,223.10	
Total, miscellaneous legislative.....	18,351.78	458.98	17,892.80	
Total legislative.....	106,651.59	62,731.52	43,920.07	
EXECUTIVE.				
Governor:				
Salaries.....	15,929.00	15,337.94	591.06	
Expenses, executive mansion.....	11,239.79	11,806.90		566.11
Stationery and printing.....	1,190.83	978.57	212.26	
Telegraph and telephone.....	496.11	340.95	155.16	
Furniture.....		.25		.25
Postage and freight.....	342.00	217.08	124.92	
Incidentals.....	630.64	782.18		131.54
Special service fund.....	1,000.00	2,900.00		1,900.00
Total governor.....	37,828.37	32,342.87		1,514.50
Executive secretary:				
Salaries.....	31,113.85	30,446.78	667.07	
Stationery and printing.....	653.45	743.71		90.26
Furniture.....	3.92	1.99	1.93	
Postage and freight.....	418.00	201.00	217.00	
Telegraph and telephone.....	12.62	9.27	3.35	
Incidentals.....	992.34	881.39	110.95	

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
EXECUTIVE—continued.				
Bureau of weights and measures:				
Salaries.....	\$11,692.05	\$11,542.00	\$150.05	
Stationery and printing.....	90.06	498.71		\$408.65
Traveling expenses.....	4,262.71	3,828.28	434.43	
Telegraph and telephone.....	27.45	81.74		54.29
Equipment of weights and measures.....	154.60	167.52		12.92
Postage and freight.....	1,065.81	678.93	386.88	
Incidentals.....	222.93	355.30		132.37
Bureau of supplies, printing, and transportation:				
Salaries.....	26,128.20	24,086.23	2,036.97	
Contingent expenses.....	6,761.44	5,344.00	1,417.44	
Total, executive secretary <sup>1</sup> .....	83,594.43	78,866.85	4,727.58	
Attorney general:				
Salaries.....	48,947.02	35,556.24	13,390.78	
Incidentals.....	2,057.34	1,981.70	75.64	
Litigation fund.....	1,703.55	1,614.30	89.25	
Postage.....	396.00	300.00	96.00	
Traveling expenses.....	739.21	593.67	145.54	
Transportation of prisoners.....		255.04		255.04
Total.....	53,843.12	40,300.95	13,542.17	
Penal institutions—				
Reform school—				
Salaries.....	13,654.49	12,671.63		17.14
Subsistence.....	9,562.67	5,059.65	4,503.02	
Equipment.....	1,282.68	635.84	646.84	
Lighting, power, and water.....	1,597.40	945.85	651.55	
Telegraph and telephone.....	73.25	71.42	1.83	
Transportation and care of animals.....	473.59	503.59		30.00
Postage and freight.....	42.77	31.29	11.48	
Incidentals.....	4,298.71	3,019.82	1,278.89	
Total.....	30,985.55	23,929.09	7,046.47	
Penitentiary—				
Salaries.....	23,101.56	19,226.64	3,874.92	
Food for prisoners.....	31,410.87	20,965.89	10,444.98	
Clothing.....	8,365.98	5,505.82	2,860.16	
Saving fund.....	2,158.60	2,982.30		773.70
Medicines.....	745.16	666.21	78.95	
Fuel.....	556.86	408.92	147.94	
Incidentals.....	3,864.06	3,845.80	18.26	
Water.....	824.17	1,009.20		185.03
Lighting.....	1,391.36	1,491.58		100.22
Telegraph and telephone.....	73.48	74.33		.85
Postage and freight.....	84.00	30.00	4.00	
Total.....	72,526.09	56,156.69	16,369.40	
San Juan jail—				
Salaries.....	2,499.83		2,499.83	
Food for prisoners.....	13,735.23		13,735.23	
Lighting and water.....	538.02		538.02	
Telegraph and telephone.....	6.98		6.98	
Postage and freight.....	4.22		4.22	
Incidentals.....	1,254.36		1,254.36	
Total.....	18,038.64		18,038.64	
Arecibo jail—				
Salaries.....	6,406.67		6,406.67	
Food for prisoners.....	6,633.95		6,633.95	
Lighting and water.....	687.49		687.49	
Telegraph and telephone.....	59.31		59.31	
Postage and freight.....	22.83		22.83	
Incidentals.....	890.59		890.59	
Total.....	14,700.84		14,700.84	

<sup>1</sup> Bureau of supplies, printing, and transportation. "Working capital fund" not included, as it is self supporting.

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
<b>EXECUTIVE—continued.</b>				
Attorney-general—Continued.				
Penal institutions—Continued.				
San Juan and Arecibo District jails—				
Salaries.....		\$12,228.63		\$12,228.63
Food for prisoners.....		15,480.57		15,480.57
Lighting and water.....		1,242.14		1,242.14
Telegraph and telephone service.....		59.46		59.46
Postage and freight.....		26.54		26.54
Medicines and supplies.....		1,584.86		1,584.86
Total.....		30,617.20		30,617.20
Ponce jail—				
Salaries.....	\$6,935.40	6,439.14	\$496.26	
Food for prisoners.....	6,507.27	6,392.86	114.41	
Lighting and water.....	532.58	554.42		21.84
Telegraph and telephone.....	3.68	6.58		2.90
Postage and freight.....	21.07	22.38		1.31
Incidentals.....	432.71	493.86		61.15
Total.....	14,432.71	13,909.24	523.47	
Mayaguez jail—				
Salaries.....	6,364.00	6,318.34	45.66	
Food for prisoners.....	4,208.84	3,437.24	771.60	
Lighting and water.....	500.35	505.37		5.02
Telegraph and telephone.....	8.42	13.84		5.42
Postage and freight.....	22.79	31.58		8.79
Incidentals.....	487.67	328.26	159.41	
Total.....	11,592.07	10,624.63	967.44	
Humacao jail—				
Salaries.....	6,133.18	6,047.65	85.54	
Food for prisoners.....	9,168.30	6,207.85	2,960.45	
Lighting and water.....	728.95	737.88		1.07
Telegraph and telephone.....	67.15	63.76	4.39	
Postage and freight.....	31.64	43.87		12.23
Incidentals.....	653.13	1,092.50		439.37
Total.....	16,782.36	14,182.51	2,599.85	
Guayama jail—				
Salaries.....	5,233.84	5,238.94		5.10
Food for prisoners.....	6,382.65	4,096.16	2,286.49	
Lighting and water.....	356.53	327.96	28.57	
Telegraph and telephone.....	58.64	57.12	1.52	
Postage and freight.....	22.31	23.96		1.65
Incidentals.....	681.38	775.28		93.90
Total.....	12,735.35	10,519.42	2,215.93	
Aguadilla jail—				
Salaries.....	4,725.51	4,652.00	73.51	
Food for prisoners.....	4,056.77	3,073.00	983.77	
Rent.....	720.00	720.00		
Lighting and water.....	190.74	66.24	124.50	
Telegraph and telephone.....	6.06	7.44		1.38
Postage and freight.....	24.50	21.82	2.68	
Incidentals.....	682.22	442.72	239.50	
Total.....	10,405.80	8,983.22	1,422.58	
Miscellaneous—				
Women's and children's ward, salaries.....	1,440.00		1,440.00	
Transportation of prisoners.....	746.81	423.56	323.25	
Maintenance of prisoners in municipal jails.....	12,081.33	12,131.23		49.90
Total.....	14,268.14	12,554.79	1,713.35	
Total, penal institutions.....	216,467.56	181,486.79	34,980.77	
Total, attorney general.....	270,310.68	221,787.74	48,522.94	



**EXHIBIT 5.**—*Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.*

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
<b>EXECUTIVE—continued.</b>				
<b>Treasurer:</b>				
Salaries.....	\$193,399.71	\$176,066.08	\$17,333.63	
Stationery and printing.....	7,421.93	7,203.39	218.54	
Lighting and water.....	88.50	63.15	25.15	
Telegraph and telephone.....	943.85	713.42	230.43	
Incidentals and traveling expenses.....	23,896.83	20,798.89	3,097.94	
Postage and express.....	5,669.56	4,002.59	1,666.97	
Automobile repairs.....	147.11		147.11	
Engraving plates and printing internal-revenue stamps.....	8,810.04		8,810.04	
Cigar guaranty stamps.....	19.61		19.61	
Revision of the assessment of property in Porto Rico.....	6,677.76	79,667.33		\$72,989.57
Settlement of claims for over collection of rentals.....	45.17	19.22	25.95	
Compensation to stamp agents.....	714.34		714.34	
<b>Total, treasurer.....</b>	<b>247,834.21</b>	<b>288,534.07</b>		<b>40,629.86</b>
<b>Auditor:</b>				
Salaries.....	67,002.84	50,774.89	16,227.95	
Stationery and printing.....	1,230.62	1,444.90		214.28
Telegraph and telephone.....	56.23	42.99	13.24	
Traveling expenses.....	4,086.35	2,707.99	1,378.36	
Postage and freight.....	401.24	300.00	101.24	
Incidentals.....	1,985.84	1,914.42	71.42	
<b>Total, auditor.....</b>	<b>74,763.12</b>	<b>57,185.19</b>	<b>17,577.93</b>	
<b>Department of the interior:</b>				
<b>Office of the commissioner—</b>				
Salaries.....	87,196.54	78,112.95	9,083.59	
Incidentals.....	12,542.15	5,551.59	6,990.56	
Traveling expenses.....	2,152.95	2,118.88	34.07	
Postage and freight.....	2,316.14	1,522.88	793.26	
Unexpended property.....		2.41		2.41
Blank books and printing.....	2,026.63	1,582.88	443.75	
Automobile expenses.....	1,201.78	945.75	256.03	
Expenses, division of public lands.....	1,932.86	2,648.44		715.58
Telegraph and telephone.....	156.41	172.67		16.26
<b>Total.....</b>	<b>109,525.46</b>	<b>92,658.45</b>	<b>16,867.01</b>	
<b>Maintenance and repairs of public roads and bridges—</b>				
Salaries.....		96,674.79		
Asphalt and screenings.....		480.00		
Care of mules.....		866.10		
Purchase and repair of machinery.....		10,225.91		
Traveling expenses.....		12,483.99		
Cleaning ditches and landslides.....		26,496.69		
Lease of lands.....		12.00		
Repair of bridges and culverts.....		5,214.72		
Repairs, Pajardo bridge.....		416.70		
Repairs, Cibuco River bridge.....		5.71		
Stone, labor, fuel, etc.....		298,916.11		
Incidentals.....		10,225.26		
Construction, maintenance, and repair of public roads and bridges.....	578,468.62			
<b>Total.....</b>	<b>578,468.62</b>	<b>462,017.98</b>	<b>116,450.64</b>	
<b>Maintenance, repairs, and reconstruction of public buildings—</b>				
Maintenance, repairs, and reconstruction of public buildings.....	49,461.60			
Water for public buildings.....		601.68		
Electric light for public buildings.....	2,705.39	1,682.38		
Repairs to Institute of Tropical Medicine Buildings.....	915.75			
Construction of two dormitories, boys' and girls' charity schools.....	599.00			
Audiencia Building.....		966.85		
Allen Street, No. 2.....		466.57		
Allen Street, No. 3.....		720.32		
Allen Street, No. 5.....		620.69		

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
<b>EXECUTIVE—continued.</b>				
<b>Department of the interior—Continued.</b>				
Maintenance, repairs, and reconstruction of public buildings—Continued.				
Boys' charity school.....		\$2,158.37		
Girls' charity school.....		4,506.64		
Diputación Building.....		6,528.21		
Leper colony, Goat Island.....		1,557.92		
Intendencia Building.....		3,320.42		
Insane asylum.....		4,092.23		
Naval station.....		1,067.84		
Penitentiary.....		1,692.27		
Pabellones de San Juan.....		3.00		
Office, secretary of Porto Rico.....		786.12		
San Francisco, No. 60, police barracks.....		7,281.04		
Humacao public building.....		4.50		
Police barracks, Seboruco.....		267.73		
Captain of the port building, Ponce.....		722.86		
Ponce blind asylum.....		1,631.46		
Ponce district court and jail.....		2,024.08		
Culebra public building and cistern.....		285.37		
Arecibo district court.....		487.22		
Arecibo district jail.....		499.50		
Public works storehouse, Marina.....		679.67		
Insular fairgrounds.....		132.14		
Captain of the port building, Mayaguez.....		123.28		
University of Porto Rico, Mayaguez.....		1,167.39		
Caguas public building.....		187.76		
Miscellaneous repairs.....		9,131.57		
Funds for the repair of school building at Corozal.....		774.28		
Alteration, repair, and construction of reform school building.....	\$22,705.29			
Repairs, reform school buildings.....	979.68			
Reconstruction of Fajardo Custom-house.....	514.56			
Total.....	78,743.42	56,223.38	\$22,520.04	
<b>Maintenance and repair of harbor improvements—</b>				
Repairs, maintenance, and construction of certain docks, bulkheads, and water fronts.....		252.48		\$252.48
Repairing bulkhead and sea wall, in San Juan Harbor.....	2,979.15	3,715.89		736.74
Repairs to landing wharf at Cataño.....		190.78		190.78
Total.....	2,979.15	4,159.15		1,180.00
<b>Miscellaneous—</b>				
Maintenance of artesian well, Quebradillas.....	31.74	853.09		821.35
Maintenance of aqueducts, at Quebradillas and Isabela.....	1,943.53	919.60	1,023.93	
Plans for construction of public service railroads.....	571.46	70.85	500.61	
Survey, sale, or lease of certain Government lands at Boqueron, Cabo Rojo.....	17.44	119.96		102.52
Survey and sale of certain Government lands.....	271.40	1,500.46		1,229.06
Study of irrigation at Lajas and Isabela.....	13,981.49	10,759.00	3,222.49	
Study of irrigation of the districts of Ponce and Juana Diaz.....	5,323.70	13,487.07		8,163.37
Changing course of Yaural River at Arroyo.....	825.37	47.16	778.21	
Total.....	22,966.13	27,757.19		4,791.06
Total, department of the interior <sup>1</sup> .....	792,682.78	642,816.15	149,866.63	
<b>Bureau of insular telegraph:</b>				
Salaries.....	68,486.28	59,497.28	8,989.00	
Incidentals.....	23,143.38	18,661.69	4,481.69	
Reimbursing the Porto Rico Telephone Co.....	892.09	622.68	269.41	

<sup>1</sup> Total does not include special construction work for municipalities, expenditures from which appropriation are reimbursable and included in accounts receivable, Exhibit 1.

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
<b>EXECUTIVE—continued.</b>				
Bureau of insular telegraph—Continued.				
Extension of telegraph or telephone line to Guaynabo.....	\$350.65	.....	\$350.65	.....
Extension, maintenance, and operation of insular telegraph and telephone system.....		\$123.35	.....	\$123.35
Construction of telephone line between San Juan and Martín Peña.....		1,920.00	.....	1,920.00
Total, bureau of insular telegraph.....	92,872.40	80,825.00	12,047.40	.....
Department of education:				
Office of the commissioner—				
Salaries.....	40,672.12	37,505.82	3,166.30	.....
Incidentals and traveling expenses.....	8,448.13	8,067.48	380.65	.....
Postage.....	1,500.00	1,500.00	.....	.....
Total.....	50,620.25	47,073.30	3,546.95	.....
Public schools—				
Salaries, common schools.....	1,156,464.33	1,164,019.61	.....	7,555.28
Contingent expenses, common schools.....	6,733.01	6,868.05	.....	135.04
Textbooks, school supplies, and equipment.....	11,603.44	31,906.33	.....	20,302.89
Salaries, high schools.....	83,880.67	61,861.58	22,019.09	.....
Contingent expenses, high schools.....	5,530.11	4,190.89	1,339.22	.....
Summer school and institutes.....	2,980.36	1,974.89	1,005.47	.....
Equipment for high schools.....		76.30	.....	76.30
Contingent expenses, common schools, rent, equipment, and supplies for rural schools, etc.....	1,308.58	.....	1,308.58	.....
Miscellaneous—				
Instruction and training of young men from Porto Rico in the United States.....	500.00	1,000.00	.....	500.00
Technical education of Porto Rican students in the United States.....		1,250.00	.....	1,250.00
Education of young Porto Rican women in the United States.....		1,000.00	.....	1,000.00
Magazine publishing fund.....	1,849.70	35.13	1,814.57	.....
Total.....	1,270,850.20	1,274,182.78	.....	3,332.58
University of Porto Rico—				
Expenses, University of Porto Rico.....	49,999.99	49,999.68	.....	499.69
Construction and improvements.....	142.32	10.20	132.12	.....
Total.....	49,642.31	50,009.88	.....	367.57
Total, department of education.....	1,371,112.76	1,371,265.96	.....	153.20
Carnegie Library:				
Salaries.....	6,967.75	4,951.66	2,016.09	.....
Incidentals.....	1,414.40	2,011.45	.....	597.05
Total, Carnegie Library.....	8,382.15	6,963.11	1,419.04	.....
Government of the Island of Culebra:				
Salaries.....	2,992.49	2,921.33	71.16	.....
Contingent expenses.....	712.00	682.37	29.63	.....
Total, government of the Island of Culebra.....	3,704.49	3,603.70	100.79	.....
Department of agriculture and labor:				
Office of the commissioner—				
Salaries.....	14,911.94	26,754.79	.....	11,842.85
Traveling expenses.....	19.20	146.05	.....	126.85
Lighting and water.....	9.01	162.18	.....	153.17
Stationery and printing.....	121.78	450.90	.....	329.12
Postage and freight.....	30.00	65.00	.....	35.00
Telephone and telephone.....	47.61	48.00	.....	.39
Incidentals.....	228.59	200.28	28.31	.....
Total.....	15,368.13	27,837.20	.....	12,469.07

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
<b>EXECUTIVE—continued.</b>				
<b>Department of agriculture and labor—Contd.</b>				
<b>Bureau of agriculture:</b>				
Salaries.....	\$6,721.39	\$1,694.00	\$5,027.39	
Traveling expenses.....	434.03	222.25	211.78	
Printing and stationery.....	117.35		117.35	
Telegraph and telephone.....	108.51	55.00	48.51	
Exhibition supplies.....	73.16		73.16	
Incidentals.....	437.53	280.50	157.03	
Lighting and water.....	19.68		19.68	
Postage and freight.....	40.34	80.00		\$39.66
<b>Total.....</b>	<b>7,946.99</b>	<b>2,331.75</b>	<b>5,615.24</b>	
<b>Bureau of labor:</b>				
Salaries.....	11,661.86	7,633.66	4,028.20	
Stationery and printing.....	377.20	109.05	268.15	
Telegraph and telephone.....	118.83	2.49	116.34	
Traveling expenses.....	3,744.67	21.91	3,722.76	
Postage and freight.....	15.00	33.33		18.33
Incidentals.....	247.94	175.81	72.13	
Bureau of labor.....		3,821.52		3,821.52
Lighting and water.....		8.96		8.96
<b>Total.....</b>	<b>16,165.50</b>	<b>11,806.73</b>	<b>4,358.77</b>	
<b>Experimental station and field force—</b>				
Salaries.....	16,622.30	12,948.33	3,673.97	
Farm labor.....	5,518.34	4,924.02	594.32	
Traveling expenses.....	1,376.00	796.66	579.34	
Printing and stationery.....	1,334.96	784.33	550.63	
Incidentals.....	194.64	60.01	134.63	
Supplies.....	1,617.95	1,568.64	49.31	
Postage and freight.....	262.50	197.73	64.76	
Telegraph and telephone service.....	124.08	109.61	15.37	
Lighting and water.....	41.56	21.52	20.04	
Motorcycle supplies.....	96.60	50.80	36.71	
Maintenance of buildings.....	1,195.95		1,195.95	
Construction of plant house.....		300.11		300.11
<b>Total.....</b>	<b>28,385.87</b>	<b>21,770.85</b>	<b>6,615.02</b>	
<b>Miscellaneous—</b>				
Expenses, board of agriculture.....	1,358.78			
Board of commissioners of agriculture.....	130.57	2,130.99		1,994.42
Expenses, commerce commission.....		76.18		76.18
Inspection of Porto Rican tobacco.....	2,931.38	6,497.20		3,565.82
Promoting the development of commerce and agriculture of Porto Rico.....	227.02		227.02	
<b>Total.....</b>	<b>2,936.19</b>	<b>8,704.37</b>		<b>5,768.18</b>
<b>Total, department of agriculture and labor.....</b>	<b>70,802.68</b>	<b>72,450.90</b>		<b>1,648.22</b>
<b>Insular police:</b>				
Salaries.....	393,566.57	372,054.37	21,512.20	
Stationery and printing.....	4,301.30	3,007.94	1,293.45	
Lighting and water.....	3,605.30	3,379.71	225.59	
Telegraph and telephone.....	3,375.46	2,722.11	653.35	
Rent of quarters.....	13,285.52	12,235.08	1,050.46	
Transportation.....	6,453.41	8,443.30		1,989.89
Automobile supplies and repairs.....	2,608.43	1,724.84	883.59	
Care of horses.....	6,327.76	6,298.09	29.67	
Postage and freight.....	1,364.67	949.45	415.22	
Secret and confidential services.....	947.67	1,471.73		524.06
Incidentals.....	3,640.01	2,895.46	744.55	
Election expenses.....		3.00		3.00
Special guardsmen for elections.....	7,192.67		7,192.67	
Additional pay for reelecting.....	3,099.70		3,099.70	
<b>Total, insular police.....</b>	<b>449,768.56</b>	<b>415,185.06</b>	<b>34,583.50</b>	
<b>Department of health:</b>				
<b>Office of the commissioner—</b>				
Salaries.....	70,418.71	58,304.87	12,113.84	
Automobile supplies and repairs.....	632.15	603.78	28.37	
Chemicals and disinfectants.....	157.67	5.60	152.07	

<sup>1</sup> Credit balance.

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
<b>EXECUTIVE—continued.</b>				
<b>Department of health—Continued.</b>				
<b>Office of the commissioner—Continued.</b>				
Lighting and water	\$504.23	\$208.64	\$295.59	
Postage and freight	1,423.04	504.19	918.85	
Purchase of vaccine and serums	158.16	114.07	44.09	
Stationery, printing, and publication of medical bulletin	2,104.80	1,715.01	389.79	
Supplies and equipment, bacteriological laboratory	1,392.63	985.33	407.30	
Supplies and equipment, chemical laboratory	1,006.15	830.88	175.27	
Telegraph and telephone	695.21	607.11	88.10	
Traveling expenses	6,417.53	2,594.22	3,823.31	
Incidentals	2,090.99	760.68	1,330.31	
Labor	3,104.35		3,104.35	
Purchase of automobile	3,180.65		3,180.65	
Total	93,286.27	67,234.38	26,051.89	
<b>Lepor colony—</b>				
Salaries	4,234.00	3,363.84	870.16	
Subsistence	7,205.97	5,013.23	2,192.69	
Clothing and bedding	3,167.64	1,305.68	1,861.96	
Incidentals	2,174.67	1,942.43	232.19	
Total	16,782.28	11,625.28	5,157.00	
<b>Quarantine hospital—</b>				
Salaries	1,796.31	1,350.14	446.17	
Subsistence	616.31	327.08	289.23	
Lighting and water	287.60	194.70	72.90	
Incidentals	461.17	129.18	331.99	
Construction and repair	1,592.22		1,592.22	
Total	4,733.61	2,001.10	2,732.51	
<b>Field force—</b>				
Salaries	77,155.40	60,488.23	16,667.17	
Killing and burying animals	6.62	6.50	.12	
Lighting and water	218.29	283.79		\$65.50
Postage and freight	298.76	475.38		176.62
Rent	1,461.81	1,629.50		167.69
Telegraph and telephone	90.12	117.34		27.22
Traveling expenses	1,777.17	6,749.34		4,972.17
Incidentals	6,446.04	11,064.29		4,638.25
Total	87,454.21	80,834.37	6,619.84	
<b>Suppression of anemia—</b>				
Salaries		4,736.66		4,736.66
Incidentals		1,214.73		1,214.73
Suppression of anemia	8,347.56	20.02	8,327.54	
Total	8,347.56	5,971.41	2,376.15	
<b>Mosquito extermination—</b>				
Salaries	6,756.10			
Traveling expenses	80.45			
Incidentals	9,097.88			
Mosquito extermination and control and suppression of malaria	7,672.72	25,743.94		
Total	23,607.15	25,743.94		2,136.79
<b>Blind asylum—</b>				
Salaries	9,134.00	7,928.00	1,206.00	
Subsistence	7,630.84	5,548.20	2,082.64	
Clothing and bedding	906.74	531.47	375.27	
Medical supplies	639.52	652.28		12.76
Fuel	746.90	656.00	90.90	
Incidentals	1,096.29	627.11	442.18	
Water and lighting	322.27	309.67	12.60	
Transportation of patients	572.00	322.74	249.26	
Total	21,021.56	16,575.47	4,446.09	

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
<b>EXECUTIVE—continued.</b>				
<b>Department of health—Continued.</b>				
Insane asylum—				
Salaries.....	\$23,293.17	\$17,955.33	\$5,337.84	
Subsistence.....	32,327.49	17,399.69	14,927.80	
Fuel.....	1,598.29	1,099.45	528.84	
Incidentals.....	2,453.46	1,818.96	634.50	
Water and lighting.....	2,043.58	1,587.33	456.25	
Medicines and supplies.....	1,372.13	1,644.63		\$272.50
Transportation of patients.....	613.96	487.99	125.97	
Total.....	63,702.08	41,963.38	21,738.70	
<b>Girls' charity school—</b>				
Salaries.....	12,996.66	11,958.00	1,038.66	
Subsistence.....	12,843.38	10,379.11	2,464.27	
Contingent expenses.....	6,110.44		6,110.44	
Clothing and bedding.....		2,415.11		2,415.11
Textbooks and school supplies.....		186.38		186.38
Medicines.....		244.57		244.57
Fuel.....		1,106.95		1,106.95
Water and lighting.....		1,088.05		1,088.05
Incidentals.....		1,188.52		1,188.52
Total.....	31,950.48	28,416.69	3,533.79	
<b>Boys' charity school—</b>				
Salaries.....	20,475.65	20,827.66		352.01
Subsistence.....	17,503.21	14,943.14	2,560.07	
Contingent expenses.....	9,451.57		9,451.57	
Clothing and bedding.....		3,919.01		3,919.01
Textbooks and school supplies.....		347.82		347.82
Medicines.....		431.99		431.99
Fuel.....		833.96		833.96
Incidentals.....		1,499.11		1,499.11
Equipment.....		1,118.65		1,118.65
Water.....		568.60		568.60
Lighting.....		601.69		601.69
Total.....	47,430.43	45,061.63	2,368.80	
<b>Miscellaneous—</b>				
Emergency fund for control and sup-				
pression of epidemics.....	5,664.33	15,378.21		9,713.88
Rat extermination.....	767.52	844.44		76.92
Suppression of measles.....	11,653.45	15,449.23		3,795.78
Care of tuberculosis patients.....	21,286.95		21,286.95	
Education and support of deaf-mute				
children.....	1,200.00		1,200.00	
Total.....	40,572.25	31,671.88	8,900.37	
<b>Total, department of health.....</b>				
	438,887.88	357,119.53	81,768.35	
<b>Civil service commission—</b>				
Salaries.....	6,305.37	5,967.65	317.72	
Incidentals.....	604.02	499.44	104.58	
Total, civil service commission.....	6,909.39	6,467.09	422.30	
<b>Institute of tropical medicine and hygiene</b>				
<b>  of Porto Rico—</b>				
Salaries.....	10,023.00	9,940.00	83.00	
Stationery and printing.....	99.24	201.17		101.93
Lighting, gas, and water.....	238.75	203.48	35.27	
Telegraph and telephone.....	74.85	73.20	1.65	
Traveling expenses.....	6.00	65.58		59.58
Care of experimental animals.....	301.84	278.93	22.91	
Postage and freight.....	96.96	99.63		2.67
Incidentals.....	168.23	779.05		610.82
Purchase of experimental animals.....	11.16	28.90		17.74
Instruments, reagents, apparatus.....	834.07		834.07	
Library.....	15.30	121.80		106.50
Culture media and ice.....	221.38	186.78	34.60	

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
EXECUTIVE—continued.				
Department of health—Continued.				
Institute of tropical medicine and hygiene of Porto Rico—Continued.				
Medicines.....	\$41. 83	\$27. 50	\$14. 33	
Miscellaneous expenses.....	1, 174. 80		1, 174. 80	
Supplies.....		806. 10		\$806. 10
Total, institute of tropical medicine and hygiene of Porto Rico.....	13, 307. 41	12, 812. 12	495. 29	
General miscellaneous:				
Miscellaneous expenditures subject to the approval of the governor.....	4, 554. 56	5, 725. 33		1, 170. 77
Salary of historian.....	1, 500. 00		1, 500. 00	
Scholarship for José Colón Román.....	550. 00		550. 00	
Scholarship for Ricardo Hernández Romero.....	550. 00		550. 00	
Scholarship for Jesús María Sanromá.....	600. 00		600. 00	
Expenses of commission to investigate appropriations and expenditures of the insular government.....	176. 67	3, 943. 81		3, 767. 14
Refunding bond expense.....	2. 06	277. 74		275. 68
Irrigation investigating commission.....	283. 60		283. 60	
Expenses of election in Porto Rico.....	25, 065. 28	23, 481. 21	1, 584. 07	
Expenses, sale of bonds for roads.....	1 775. 99	775. 99		775. 99
National guard of Porto Rico fund.....	2, 432. 99		2, 432. 99	
Repairs to school buildings in Naranjito.....	657. 67		657. 67	
Fees and expenses, board of medical examiners.....	849. 84	1, 314. 07		464. 23
Fees and expenses, board of dental examiners.....	407. 66	226. 86	180. 80	
Fees and expenses, board of pharmacy.....	1, 096. 71	1, 161. 75		65. 04
Relief of Fernando Montilla.....	900. 00		900. 00	
Compensation for the lives of members of the insular police.....	1, 000. 00		1, 000. 00	
Premium upon bonds of employees of the insular government.....	4, 715. 31	2, 722. 44	1, 992. 87	
Relief of Pedro Homar.....	500. 00		500. 00	
Sundry pensions and reliefs.....		22, 400. 00		22, 400. 00
Municipal proportion on conditional sales act No. 16, laws of 1916.....		141. 95		141. 95
Total, general miscellaneous.....	45, 066. 36	62, 171. 15		17, 104. 79
Total executive.....	4, 000, 827. 67	3, 710, 416. 49	290, 411. 18	
JUDICIAL.				
United States district court:				
Salaries.....		22, 312. 01		
Purchase of law books.....		11. 87		
Traveling expenses.....		770. 61		
Incidental expenses of the court.....		1, 606. 39		
Incidental expenses of judge's office.....		3. 37		
Incidentals of district attorney's office.....		2. 13		
Pay to bailiffs.....		321. 00		
Fees and mileage of witnesses.....		98. 61		
Fees and mileage of jurors.....		1, 679. 10		
Total, United States district court.....		26, 805. 09		26, 805. 09
Insular courts:				
Supreme court—				
Salaries.....	51, 030. 43	47, 420. 42	3, 610. 01	
Incidentals.....	943. 13	824. 28	118. 85	
Purchase of law books.....		10. 00		10. 00
Water.....	19. 84	14. 68	5. 16	
Lighting.....	71. 04	44. 60	26. 44	
Printing and publication of Porto Rico reports on appeals from decisions of the registrars of property.....		295. 41		295. 41
Total.....	52, 064. 44	48, 609. 39	3, 455. 05	

<sup>1</sup> Credit balance.

EXHIBIT 5.—Comparative statement of accrued expenses payable from insular revenue appropriations for the years ending June 30, 1918, and June 30, 1917—Continued.

Description.	Year ending June 30.		Increase.	Decrease.
	1918	1917		
JUDICIAL—continued.				
Insular courts—Continued.				
Publication of the decisions of the supreme court—				
Salaries.....	\$5,507.50	\$6,200.00		\$692.50
Incidentals.....	7.05	104.80		97.74
Advance sheets.....	749.09	940.24		191.15
Publication of the decisions of the supreme court.....	20.60	21.36		.76
Total.....	6,284.25	7,266.40		982.15
District courts—				
Salaries.....	121,333.42	122,057.95		724.53
Purchase of law books.....		.07		.07
Postage.....	745.00	470.00	\$275.00	
Incidentals.....	4,116.58	3,467.62	648.96	
Water.....	182.44	137.45	44.99	
Lighting.....	210.62	227.96		17.34
Rent.....	1,622.50	1,580.00	42.50	
Traveling expenses, judges and fiscals.....	1,673.84	1,484.10	189.74	
Care of horses.....	1,377.50	1,370.00	7.50	
Traveling expenses, marshals.....	82.22	80.27	1.95	
Autopsies and exhumations.....	936.00	780.00	156.00	
Fees of jurors.....	12,176.78	14,634.86		2,458.08
Fees of witnesses in cases of lunacy.....	1,345.00	506.00	839.00	
Fees of witnesses.....	17,689.12	13,467.38	4,221.74	
Total.....	163,491.02	160,286.66	3,204.36	
Municipal courts—				
Salaries.....	99,770.17	99,259.50	510.67	
Incidentals.....	3,581.78	3,115.73	466.05	
Rent.....	6,563.20		6,563.20	
Traveling expenses, court officials.....	3,785.09	3,410.22	374.87	
Care of horses.....	3,321.54	3,313.34	8.20	
Traveling expenses, marshals.....	1,762.84	1,482.53	280.31	
Fees of witnesses.....	2,160.20	1,964.20	196.00	
Total.....	120,944.82	112,545.52	8,399.30	
Total, insular courts.....	342,784.53	328,707.97	14,076.56	
Registrars of property:				
Salaries.....	52,955.27	47,907.55	5,047.72	
Incidentals.....	2,028.06	2,168.84		140.78
Rent.....	3,140.00	3,080.00	110.00	
Total registrars of property.....	58,123.33	53,156.39	5,016.94	
Total judicial.....	400,907.86	408,619.45		7,711.59

RECAPITULATION.

Legislative.....	\$106,651.59	\$62,731.52	\$43,920.07	
Executive.....	4,000,827.67	3,710,416.49	290,411.18	
Judicial.....	400,907.86	408,619.45		\$7,711.59
Total.....	4,508,387.12	4,181,767.46	326,619.66	



EXHIBIT No. 6.—*Loans to municipalities as of June 30, 1918.*<sup>1</sup>

Municipality.	Balance July 1, 1917.	Loans made dur- ing year.	Amount repaid during year.	Total amount of loans, June 30, 1918.	
				Converted into bond issues pending execution. <sup>2</sup>	Loans not convertible into bond issues.
Aguadilla.....	\$3,500.00	\$4,000.00	\$500.00		\$7,000.00
Aguas Buenas.....	2,278.20		300.00		1,978.20
Albionito.....	10,900.00	5,600.00		\$16,500.00	
Do.....		2,400.00			2,400.00
Añasco.....	2,000.00		1,000.00		1,000.00
Corozal.....	4,800.00		300.00		4,500.00
Fajardo.....	4,400.00	1,000.00	1,000.00		4,400.00
Guayama.....	7,000.00		1,500.00		5,500.00
Guayanilla.....		1,500.00	500.00		1,000.00
Gurabo.....	2,280.00		585.00		1,695.00
Isabela.....	3,500.00		500.00		3,000.00
Juana Díaz.....			750.00		
Loíza.....	1,600.00		1,600.00		
Maricao.....	7,000.00			7,000.00	
Maunabo.....	9,500.00			9,500.00	
Mayaguez.....		9,584.48			9,584.48
Naranjito.....	1,100.00		200.00		900.00
Patillas.....		442.31	442.31		
Pedueñas.....	700.00		100.00		600.00
Ponce.....	21,500.00	21,000.00		42,500.00	
Quebradillas.....	1,020.00		170.00		850.00
Salinas.....		6,000.00	1,500.00		4,500.00
San Juan.....		5,000.00			5,000.00
San Lorenzo.....	700.00				700.00
San Sebastian.....	600.00		600.00		
Tos Alta.....	50.00	1,300.00	150.00		1,200.00
Utuado.....	4,991.85	2,000.00		6,991.85	
Total.....	90,150.05	59,826.79	11,677.31	82,491.85	55,807.68
Total amount of both classes.....				\$138,299.53	
Less reserve for municipal loan account.....				1,000.00	
Grand total.....				137,299.53	

<sup>1</sup> These loans are repayable to the indefinite no-fiscal year appropriation "Relief of municipalities," as shown in Exhibit No. 29.

<sup>2</sup> For details and explanation of these bond issues see Exhibit No. 9.

EXHIBIT No. 7.—*Loans to school boards, as of June 30, 1918.*<sup>1</sup>

School board.	Balance July 1, 1917.	Loans made dur- ing year.	Amount repaid during year.	Total amount of loans, June 30, 1918.	
				Converted into bond issue pending execution.	Loans not converted into bond issues.
Caguas.....	\$800.00		\$800.00		
Cayey.....		\$25,000.00		\$25,000.00	
Juncos.....	1,000.00		1,000.00		
Manati.....	1,200.00		600.00		\$800.00
Naranjito.....	1,066.64		133.32		933.32
Total.....	4,066.64	25,000.00	2,533.32	25,000.00	1,533.32
Total amount of both classes.....				\$26,533.32	

<sup>1</sup> These loans are repayable to the indefinite no-fiscal year appropriation "Relief of school boards."

**EXHIBIT No. 8.—Loans from school building fund—Amounts due from school boards for construction of school buildings under acts of the legislative assembly approved Mar. 14, 1907, and Mar. 9, 1908.**

School board.	Due govern- ment July 1, 1917.	Total cost of improve- ments dur- ing year.	Proportion assumed by insular gov- ernment and charged to construction of school buildings.	Remainder chargeable to school boards.	Repaid on loans during year.	Balance due government June 30, 1918.
Aguada.....	\$1,320.00				\$330.00	\$990.00
Aguadilla.....	5,400.00				900.00	4,500.00
Agua Buenas.....	181.99	\$36.05	\$18.02	\$18.03	100.00	100.02
Aibonito.....	3,999.99				600.00	3,399.99
Añasco.....	900.00				450.00	450.00
Caguas.....	1,200.00				1,200.00	
Carolina.....	598.98				598.98	
Ciales.....	1,685.98				450.00	1,235.98
Cidra.....	450.00				225.00	225.00
Comerio.....	2,399.61				500.00	2,439.61
Corozal.....	1,200.00				400.00	800.00
Guayanilla.....	597.97				300.00	297.97
Gurabo.....		8,399.06	4,199.51	4,199.55	900.00	3,299.55
Isabela.....	250.00				250.00	
Luquillo.....	8.65	90.66	45.33	45.33	53.98	
Maunabo.....	630.00				315.00	315.00
Moca.....	350.00				280.00	70.00
Rincon.....	2,801.57	710.91	355.46	355.46	400.00	2,757.03
San Lorenzo.....	2,700.00				450.00	2,250.00
Trujillo Alto.....	1,000.00				225.00	775.00
Vega Alta.....	1,800.00				450.00	1,350.00
Vega Baja.....	700.00				700.00	
<b>Total.....</b>	<b>30,714.72</b>	<b>9,236.68</b>	<b>4,618.31</b>	<b>4,618.37</b>	<b>10,077.94</b>	<b>25,256.15</b>

EXHIBIT No. 9 (PART I).—Municipal and school board bonds pending execution and delivery to treasurer of Porto Rico, June 30, 1918, and their redemption funds.<sup>1</sup>

Municipality.	Authorization and description.	Date of—		Bond issue authorized.	Converted loans from Exhibit No. 6 on June 30, 1918.	Redemption funds, cash balances June 30, 1918.	
		Issue.	Maturity.			Insular revenues.	Trust fund.
Albionto.....	Sept 2, 1915, series of \$1,000, redeemable July 1, 1916; series of \$1,500, redeemable yearly July 1, 1917-1928; and \$2,000 redeemable July 1, 1928.	July 1, 1915	July 1, 1928	\$16,500.00	\$16,500.00	.....	\$4,000.00
Maricao.....	Sept. 6, 1913, series of \$1,000, redeemable yearly beginning July 1, 1914.	July 1, 1913	July 1, 1924	11,000.00	7,000.00	\$1,000.00	4,000.00
Maunabo.....	July 27, 1915, series of \$1,000, redeemable yearly beginning July 1, 1916.	July 1, 1915	July 1, 1927	12,000.00	9,500.00	.....	3,343.59
Ponce.....	June 9, 1917, series of \$16,000, redeemable July 1, 1918; series of \$14,000, redeemable July 1, 1919; series of \$10,000, redeemable yearly July 1, 1920-1928.	July 1, 1916	July 1, 1928	120,000.00	42,500.00	.....	16,000.00
Utusado.....	May 4, 1917, series of \$2,000, redeemable yearly beginning July 1, 1918.	.....do.....	July 1, 1925	16,000.00	6,991.85	.....	2,000.00
Municipalities total.	Mar. 29, 1917, series of \$2,000, redeemable July 1, 1918-1923; series of \$2,500, redeemable July 1, 1924-1929; and \$3,000 redeemable July 1, 1930.	July 1, 1916	July 1, 1930	175,500.00	82,491.85	1,000.00	28,343.59
School board, Cayey.....				30,000.00	25,000.00	.....	2,000.00
Grand total.....				205,500.00	107,491.85	1,000.00	31,343.59

<sup>1</sup> Although these bonds have not been executed under act No. 4, approved Feb. 19, 1913, they were treated as actual bond issues in all respects, and the ordinary loans brought from Exhibit No. 6 were treated as converted into bond issues from the date of the bonds.

EXHIBIT NO. 9 (PART II).—*Municipal and school board bonds executed and delivered by treasurer of Porto Rico on June 30, 1918, and their redemption funds.*<sup>1</sup>

Municipality.	Authorization and description.	Date of—		Par value of bonds issued.	Bonds outstanding on June 30, 1918.				Total.	Redemption fund, cash, balances June 30, 1918.		
					Owned by the people of Porto Rico.		Held by University of Porto Rico.					
		To secure insular refunding bonds.									To secure loan from Mechanics & Metals National Bank.	
Issue.	Maturity.	To secure insular refunding bonds.	To secure loan from Mechanics & Metals National Bank.	Unpledged.								
Aguadilla.....	Jan 13, 1915, series of \$5,000 redeemable yearly beginning July 1, 1917.	July 1, 1914	July 1, 1936	\$100,000	\$90,000	.....	\$5,000	.....	\$95,000	\$5,000.00		
Arroyo.....	Sept. 6, 1913, series of \$1,000 redeemable yearly beginning July 1, 1915.	July 1, 1913	July 1, 1938	24,000	16,000	\$4,000	1,000	.....	21,000	1,168.67		
Barceloneta.....	Feb. 14, 1914, series of \$500 redeemable yearly beginning July 1, 1914.	Jan. 1, 1914	July 1, 1923	5,000	.....	2,500	500	.....	3,000	500.00		
Barraquitas.....	July 22, 1915, series of \$500 redeemable yearly beginning July 1, 1916.	July 1, 1915	July 1, 1933	9,000	.....	7,500	500	.....	8,000	500.51		
Bayamon.....	July 22, 1915, series of \$2,000 redeemable yearly beginning July 1, 1916.	.....do.....	July 1, 1923	16,000	.....	10,000	2,000	.....	12,000	2,000.00		
Caguas.....	Oct. 24, 1913, series of \$5,000 redeemable yearly beginning July 1, 1914.	July 1, 1913	July 1, 1933	100,000	75,000	.....	5,000	.....	80,000	5,000.00		
Cayey.....	Feb. 14, 1914, three series at \$2,000 redeemable July 1, 1914, 1915, and 1916, and series of \$2,500 redeemable yearly beginning July 1, 1917.	.....do.....	July 1, 1932	48,000	25,000	10,000	2,500	.....	37,500	2,500.00		
Ciales.....	Mar. 25, 1915, series of \$1,500 redeemable yearly beginning July 1, 1915.	July 1, 1914	July 1, 1933	28,500	22,500	.....	1,500	.....	24,000	1,500.00		
Coamo.....	Sept. 13, 1913, series of \$1,500 redeemable July 1, 1913, and series of \$2,500 redeemable beginning July 1, 1914.	July 1, 1913	July 1, 1921	21,500	.....	7,500	2,500	.....	10,000	2,500.00		
Comerio.....	Jan. 13, 1915, one series of \$500 redeemable July 1, 1916; series of \$1,000 each redeemable yearly beginning July 1, 1917.	July 1, 1914	July 1, 1929	13,500	11,000	.....	1,000	.....	12,000	1,000.00		
Dorado.....	Sept. 24, 1913, series of \$500 redeemable yearly, beginning July 1, 1913.	July 1, 1913	July 1, 1928	8,000	.....	5,000	500	.....	5,500	500.00		

<sup>1</sup> These bonds were issued under Act No. 4, approved Feb. 18, 1913, and received by the Insular government in payment of ordinary loans outstanding. In accordance with the terms of the same act the bonds are carried as cash by the treasurer of Porto Rico.

## REPORT OF THE GOVERNOR OF PORTO RICO.

EXHIBIT No. 9 (PART II).—Municipal and school board bonds executed and delivered by treasurer of Porto Rico on June 30, 1918, and their redemption funds—Continued.

Municipality.	Authorization and description.	Date of—		Par value of bonds issued.	Bonds outstanding on June 30, 1918.				Total.	Redemption fund, cash balances June 30, 1918.
		Issue.	Maturity.		Owned by the people of Porto Rico.			Held by University of Porto Rico.		
					To secure insular refunding bonds.	To secure loan from Mechanics & Metals National Bank.	Unpledged.			
Fajardo.....	Sept. 27, 1913, series of \$2,000 redeemable July 1, 1914, and series of \$5,500 redeemable yearly, beginning July 1, 1916.	July 1, 1913	July 1, 1934	\$112,000	\$66,000	\$22,000	\$5,500	.....	\$93,500	5,500.00
Guayama.....	July 22, 1915, series of \$4,500 redeemable yearly, beginning July 1, 1916.	July 1, 1915	July 1, 1935	90,000	.....	72,000	9,000	.....	81,000	\$5,109.93
Guayanilla.....	Sept. 6, 1913, series of \$1,000 redeemable yearly, beginning July 1, 1914-1932, and \$2,000 redeemable July 1, 1933.	July 1, 1913	July 1, 1933	21,000	12,000	4,000	1,000	.....	17,000	1,000.00
Guarabo.....	Jan. 21, 1915, series of \$1,000 redeemable yearly, beginning July 1, 1917.	July 1, 1914	July 1, 1936	20,000	18,000	.....	1,000	.....	19,000	1,000.00
Humacao.....	Feb. 14, 1914, series of \$2,000 redeemable yearly, Jan. 1, 1915-1919; series of \$2,500 redeemable Jan. 1, 1920-1927; and series of \$3,000 redeemable yearly, beginning Jan. 1, 1928.	.....do.....	Jan. 1, 1937	60,000	.....	52,000	.....	.....	52,000	1,000.00
Jayuya.....	Sept. 6, 1913, series of \$500, redeemable yearly, beginning July 1, 1913.	July 1, 1913	July 1, 1922	5,000	.....	2,000	500	.....	2,500	500.00
Juncos.....	May 29, 1913, series of \$2,000, redeemable yearly, beginning July 1, 1915.	.....do.....	July 1, 1933	38,000	22,000	8,000	2,000	.....	32,000	2,000.00
Lares.....	Jan. 25, 1915, one series of \$500, redeemable July 1, 1916; series of \$1,500, redeemable July 1, 1917-18; and series of \$3,000, redeemable yearly, beginning July 1, 1919.	July 1, 1914	July 1, 1935	54,500	51,000	.....	1,500	.....	52,500	1,500.00
Penuelas.....	Feb. 14, 1914, series of \$500, redeemable yearly, Jan. 1, 1915-1929, and series of \$1,000, redeemable yearly, beginning Jan. 1, 1930.	Jan. 1, 1914	Jan. 1, 1935	13,500	.....	1,500	.....	\$10,000	11,500	250.00
Ponce.....	Aug. 15, 1913, series of \$50,000, \$70,000, \$110,000, and \$160,000, redeemable, respectively, July 1, 1923, 1933, 1943, and 1953.	July 1, 1913	July 1, 1953	390,000	390,000	.....	.....	.....	390,000	20,000.00

Rio Piedras.....	June 27, 1914, series of \$2,000, redeemable yearly July 1, 1915-1920, and series of \$1,500, redeemable yearly, beginning July 1, 1921.	July 1, 1914	July 1, 1924	18,000	10,000	.....	2,000	.....	12,000	2,000.00
Salinas.....	Jan. 21, 1915, one series of \$1,000, redeemable July 1, 1915-1916, and series of \$1,500, redeemable July 1, 1916-1920.	do.....	July 1, 1920	23,500	18,000	.....	1,500	.....	19,500	1,500.00
San Lorenzo.....	Sept. 6, 1913, series of \$500, redeemable yearly, beginning July 1, 1914.	July 1, 1913	July 1, 1921	4,000	.....	.....	500	.....	2,000	500.00
San Sebastian.....	Mar. 25, 1915, one series of \$500, redeemable July 1, 1916-1917; series of \$1,000, redeemable yearly July 1, 1917-19; and series of \$1,500, redeemable yearly beginning July 1, 1920.	July 1, 1914	July 1, 1925	12,500	10,000	.....	1,000	.....	11,000	1,000.00
Tos Baja.....	Oct. 3, 1913, series of \$1,000, redeemable yearly, beginning July 1, 1914.	July 1, 1913	July 1, 1926	13,000	4,000	.....	1,000	.....	9,000	1,000.00
Vega Alta.....	May 19, 1913, series of \$1,000, redeemable yearly, beginning July 1, 1914.	do.....	July 1, 1923	10,000	1,000	.....	1,000	.....	6,000	1,000.00
Vieques.....	Sept. 30, 1913, one series of \$1,000, redeemable July 1, 1914, and series of \$1,500, redeemable yearly, beginning July 1, 1915.	do.....	July 1, 1932	28,000	15,000	.....	1,500	.....	22,500	1,500.00
Yauco.....	Feb. 16, 1914, series of \$5,000, redeemable yearly, beginning Jan. 1, 1915.	Jan. 1, 1914	Jan. 1, 1932	90,000	45,000	.....	25,000	.....	70,000	2,500.00
Municipalities, total.				1,374,500	901,500	248,500	51,000	10,000	1,211,000	71,029.11
School boards:										
Arecibo.....	Aug. 27, 1914, series of \$3,000, redeemable yearly, beginning July 1, 1915.	July 1, 1914	July 1, 1924	30,000	.....	18,000	3,000	.....	21,000	3,000.00
Camuy.....	Jan. 4, 1916, series of \$1,000, redeemable yearly, beginning July 1, 1916.	do.....	July 1, 1927	12,000	.....	9,000	1,000	.....	10,000	1,000.00
Humacao.....	Sept. 6, 1913, series of \$3,000, redeemable yearly, beginning July 1, 1915.	July 1, 1913	July 1, 1928	42,000	18,000	12,000	3,000	.....	33,000	3,000.00
Mayaguez.....	Sept. 6, 1913, series of \$0,500, redeemable yearly, beginning July 1, 1915.	do.....	July 1, 1924	65,000	13,000	26,000	6,500	.....	45,500	6,500.00
Naguabo.....	Jan. 4, 1916, series of \$1,500, redeemable yearly, beginning July 1, 1916.	July 1, 1914	July 1, 1927	18,000	.....	13,500	1,500	.....	15,000	1,500.00
Ponce.....	Sept. 6, 1913, series of \$14,000, redeemable yearly, beginning July 1, 1915.	July 1, 1913	July 1, 1924	140,000	28,000	56,000	14,000	.....	98,000	14,000.00
San Juan.....	Oct. 10, 1916, series of \$30,000, redeemable yearly, beginning July 1, 1918.	Jan. 1, 1916	July 1, 1927	300,000	300,000	.....	.....	.....	300,000	30,000.00
Utua.....	Aug. 8, 1915, series of \$1,500, redeemable yearly, beginning July 1, 1916.	July 1, 1914	July 1, 1931	24,000	.....	18,000	3,000	.....	21,000	1,500.00
School boards, total.				631,000	369,000	152,500	32,000	.....	543,500	60,500.00
Grand total.				2,005,500	1,260,500	401,000	83,000	10,000	1,754,500	131,529.11

EXHIBIT No. 10.—Road construction in Porto Rico.

Road No.	Designation.	Kilo-meters.	Sections.		Completed by Spanish Government.		Completed by United States military government.		Completed by the civil government.		Total.	
					Kilo-meters.	Cost.	Kilo-meters.	Cost.	Kilo-meters.	Cost.	Kilo-meters.	Cost.
	Total road and bridge construction in Porto Rico up to June 30, 1917, as shown on page 263 of the printed Governor's report for the year 1917.											
1	San Juan-Ponce Highway.....	134.0		"Portuguese" Bridge, San Antonio Bridge, Martin Peña Bridge.....	275.0	\$2,500,927.07	141.7	\$1,085,697.07	738.0	\$4,425,825.03	1,174.7	\$8,072,440.17
2	Rio Piedras-Ponce.....	263.1		Variant Angostura.....						3,907.32		3,907.32
				Aguadilla Ahasco.....						1,771.22		1,771.22
				Mayaguez Ahasco Culverts.....						6,822.04		6,822.04
				Martin Peña-Bayamon and Bayamon Bridge.....						3,100.00		3,100.00
				Portugues Bridge.....						1,753.96		1,753.96
				Bucana Bridge.....						27,905.38		27,905.38
				Inabon Bridge.....						4,475.24		4,475.24
				Caño Yabucoa Bridge.....						14,737.31		14,737.31
				Guyones Bridge.....						275.03		275.03
				Ingenio and Cortadera Bridges.....						390.27		390.27
				Santiago Bridge.....						7,011.98		7,011.98
				Vueltas-Emajagua and Celba Bridges.....						8,432.37		8,432.37
				Naguabo-Celba Bridges.....						12,311.58		12,311.58
				Cayey-Guayama.....						16,469.00		16,469.00
				Caguas-Aguas Buenas.....						14.00		14.00
4	Cayey-Guayama.....	26.0		Quebrada Los Muertos Culvert.....						2,666.27		2,666.27
5	Barraquitas-Humacao.....	66.0		Ponce-Arecibo.....						1,939.01		1,939.01
6	Ponce-Arecibo.....	82.0		San Lorenzo-Las Piedras.....						0.5		0.5
7	Caguas-Las Piedras (via San Lorenzo).....	23.0		Lares-Adjuntas.....						342,766.08		42,766.08
8	Aguadilla-Adjuntas.....	63.0		Caño Guatemala Bridge.....						4,185.59		4,185.59
9	Bayamon-Comerio.....	27.3		Corozal-Barros and Corozal Bridge.....						362,108.24		62,108.24
10	Reyes Catolico-Coamo.....	57.0		Ciales-Juana Diaz.....						38,506.18		38,506.18
11	Manatí-Juana Diaz.....	48.0		San Lorenzo-Road No. 3.....								
12	San Lorenzo-Road No. 3 (via Patillas).....	28.0		Lares-Arecibo.....						2.0		2.0
13	Mayaguez-Arecibo.....	74.5		Maricao-Indiera.....						376,522.51		76,522.51
14	Consumo-Road No. 8.....	30.0								12,402.57		2,402.57

[illegible]

## 1 Survey.

## 2 Construction and survey.

<sup>a</sup> The total shown herewith is \$94,412.61 + \$29.90 more than that appearing on the balance sheet of the people of Porto Rico (Exhibit No. 1), due to the fact that said amount has been spent for construction purposes out of the appropriation for construction maintenance of roads and bridges. The auditor only carries as cost of construction the amounts spent from appropriations for construction purposes.



EXHIBIT No. 11.—Statement showing the location by municipalities and valuation of real estate owned by the insular government as of June 30, 1918.

Municipalities.	Valuation as of July 1, 1917.	Additions during year.	Deductions during year.	Valuation as of June 30, 1918.
Adjuntas.....	\$2,785.00			\$2,785.00
Aguadilla.....	520.00	\$1,020.00		1,540.00
Aguaa Buenas.....	501.00			501.00
Albionito.....	1,765.00			1,765.00
Añasco.....	262.00			262.00
Arecibo.....	109,790.00	300.00	\$6,490.00	103,600.00
Arroyo.....	200.00			200.00
Barceloneta.....	20,400.00			20,400.00
Barranquitas.....	320.00		100.00	220.00
Barros.....	6,402.00		1,844.00	4,558.00
Bayamon.....	175.00			175.00
Cabo Rojo.....	8,999.84	4,926.90		13,926.74
Caguas.....	2,140.00			2,140.00
Camuy.....	20.00			20.00
Carolina.....	1,950.00			1,950.00
Cayey.....	730.00		500.00	230.00
Ciales.....	3,338.00			3,338.00
Cidra.....	72.00			72.00
Coamo.....	210.00			210.00
Culebra.....	320.00		300.00	20.00
Dorado.....	550.00			550.00
Fajardo.....	7,912.00			7,912.00
Guanica.....	800.00			800.00
Guayama.....	22,130.00			22,130.00
Guayanilla.....	1,771.70			1,771.70
Hatillo.....		15.00		15.00
Humacao.....	3,000.00	1,174.00		4,174.00
Isabela.....	766.00			766.00
Juana Diaz.....	1,060.00		110.00	950.00
Lajas.....	2,930.00	6,138.80		9,068.80
Las Marias.....	1,120.00	100.00		1,220.00
Las Piedras.....	120.00			120.00
Loiza.....		8,754.82		8,754.82
Manati.....	150.00			150.00
Maricao.....	10,180.00			10,180.00
Mayaguez.....	79,013.62		23,370.00	55,643.62
Naranjito.....	1,062.00			1,062.00
Patillas.....	720.00			720.00
Ponce.....	32,202.00		1,920.00	30,282.00
Quebradillas.....	115.00			115.00
Rincon.....	50.00			50.00
Rio Grande.....	120.00			120.00
Rio Piedras.....	45,888.00	450.00		46,338.00
Sabana Grande.....	1,396.00		285.00	1,111.00
Salinas.....	1,468.00			1,468.00
San German.....	1,400.00			1,400.00
San Juan.....	4,036,536.67	5,646.27	428,097.27	4,614,085.67
San Lorenzo.....	75.00	400.00		475.00
San Sebastian.....	1,988.00			1,988.00
Santa Isabel.....	1,250.00			1,250.00
Toa Alta.....	40.00			40.00
Utua.....	15,847.00			15,847.00
Vega Baja.....	2,400.00		400.00	2,000.00
Vieques.....	5,728.00			5,728.00
Yabucoa.....	150.00			150.00
Yauco.....	27,320.00			27,320.00
Total.....	5,468,118.83	28,925.79	468,416.27	5,033,668.35

EXHIBIT No. 12.—Statement showing locations and valuations of public buildings, exclusive of real estate, owned by the insular government, as of June 30, 1918.

Buildings and municipalities.	Valuation as of July 1, 1917.	Changes during year.	Valuation as of June 30, 1918.
Adjuntas: Rural school, Barrio Pastillo.....	\$250.00	.....	\$250.00
Aguada: Rural school, Barrio Atalaya.....	250.00	.....	250.00
Aguas Buenas:			
Rural school, Barrio Jagüeyes.....	250.00	.....	250.00
Rural school, Barrio Mulas.....	250.00	.....	250.00
Aibonito:			
Road house No. 21, Carretera No. 1.....	400.00	.....	400.00
Road house No. 22, Carretera No. 1.....	750.00	.....	750.00
Road house No. 23, Carretera No. 1.....	750.00	.....	750.00
Rural school, Barrio Casey Abajo.....	250.00	.....	250.00
Arecibo:			
Sanitation office.....	1,400.00	.....	1,400.00
Sanitation stable.....	3,300.00	.....	3,300.00
District court and police quarters.....		\$16,590.00	16,590.00
Municipal court building.....		5,000.00	5,000.00
Arroyo: Rural school, Barrio Antigua.....	250.00	.....	250.00
Barros:			
Rural school, Barrio Barros.....	250.00	.....	250.00
Road house No. 2, Carretera No. 4.....	1,000.00	.....	1,000.00
Frame building, town.....		1,600.00	1,600.00
Bayamon:			
Road house No. 1, Carretera No. 2.....	250.00	.....	250.00
Road house No. 2, Carretera No. 2.....	750.00	.....	750.00
Caguas:			
Government building.....	2,000.00	.....	2,000.00
Road house No. 10, Carretera No. 1.....	100.00	.....	100.00
Road house No. 11, Carretera No. 1.....	50.00	.....	50.00
Road house No. 12, Carretera No. 1.....	100.00	.....	100.00
Road house No. 13, Carretera No. 1.....	500.00	.....	500.00
Road house No. 14, Carretera No. 1.....	150.00	.....	150.00
Road house No. 15, Carretera No. 1.....	750.00	.....	750.00
Road house No. 16, Carretera No. 1.....	750.00	.....	750.00
Camuy:			
Rural school, Barrio Camuy Arriba.....	250.00	.....	250.00
Rural school, Barrio Piedra Gorda.....	250.00	.....	250.00
Rural school, Barrio Puente.....	250.00	.....	250.00
Rural school, Barrio Yeguada.....	250.00	.....	250.00
Cayey:			
Road house No. 17, Carretera No. 1.....	750.00	.....	750.00
Road house No. 18, Carretera No. 1.....	750.00	.....	750.00
Road house No. 19, Carretera No. 1.....	750.00	.....	750.00
Road house No. 20, Carretera No. 1.....	750.00	.....	750.00
Road house No. 1, Carretera No. 4.....	750.00	.....	750.00
Coamo:			
Road house No. 24, Carretera No. 1.....	800.00	.....	800.00
Road house No. 25, Carretera No. 1.....	750.00	.....	750.00
Road house No. 26, Carretera No. 1.....	750.00	.....	750.00
Culebra:			
Rural school.....	140.00	.....	140.00
Public building and cistern.....	3,395.61	.....	3,395.61
Fajardo: Customhouse.....		1,080.00	1,080.00
Guayama:			
Offices for irrigation service.....		5,000.00	5,000.00
Sanitation stable.....	2,810.00	.....	2,810.00
District jail.....	12,036.24	411.98	12,448.17
Road house No. 3, Carretera No. 4.....	3,000.00	.....	3,000.00
Road house No. 4, Carretera No. 4.....	750.00	.....	750.00
Guaynabo:			
Rural school, Barrio Guaynabo.....	250.00	.....	250.00
Rural school, Barrio Pueblo Viejo.....	250.00	.....	250.00
Hatillo:			
Rural school, Barrio Bayaney.....	250.00	.....	250.00
Rural school, Barrio Yeguada, Occidental.....	250.00	.....	250.00
Rural school, Barrio Pajull.....	250.00	.....	250.00
Humacao:			
District jail.....	24,983.61	.....	24,983.61
Rural school, Barrio Buena Vista.....	250.00	.....	250.00
Jayuya: Rural school, Barrio Collores.....	250.00	.....	250.00
Juana Diaz:			
Road house No. 27, Carretera No. 1.....	750.00	.....	750.00
Road house No. 28, Carretera No. 1.....	500.00	.....	500.00
Las Marias: Rural school, Barrio Anones.....	250.00	.....	250.00
Mayaguez:			
Reform school building.....	118,487.18	11.05	118,498.23
Captain of the port building.....	5,500.00	.....	5,500.00
Buildings on United States Experimental Station grounds.....	10,578.64	.....	10,578.64
Sanitation stable.....	2,749.50	.....	2,749.50
Frame building, San Jose Street.....	700.00	.....	700.00
Laboratory building.....	18,000.00	.....	18,000.00
Buildings for College of Agriculture and Mechanic Arts.....	46,395.47	1,817.56	67,280.57

**EXHIBIT No. 12.—Statement showing locations and valuations of public buildings, exclusive of real estate, owned by the insular government, as of June 30, 1918—Contd.**

Buildings and municipalities.	Valuation as of July 1, 1917.	Changes during year.	Valuation as of June 30, 1918.
<b>Mayaguez—Continued.</b>			
Frame building, Mona Island.....		\$590.00	\$590.00
Road house No. 1, Carretera No. 2 to Añasco.....	\$750.00		750.00
Road house No. 2, Carretera No. 2 to Añasco.....	750.00		750.00
Road house No. 1, Carretera No. 2 to Yauco.....	750.00		750.00
Road house No. 2, Carretera No. 2 to Yauco.....	750.00		750.00
<b>Moca:</b>			
Rural school, Barrio Centro.....	250.00		250.00
Rural school, Barrio Aceituna Abajo.....	250.00		250.00
<b>Morovis:</b>			
Rural school, Barrio Guzman.....	250.00		250.00
Rural school, Barrio Perchas.....	250.00		250.00
Rural school, Barrio Franquez.....	250.00		250.00
<b>Peñuelas:</b> Rural school, Barrio Coto.....	250.00		250.00
<b>Naranjito:</b> Rural school, Barrio Cuadrana.....	250.00		250.00
<b>Ponce:</b>			
Blind Asylum.....	45,000.00		45,000.00
District court and jail.....	109,000.00		109,000.00
Captain of the port building.....	4,000.00		4,000.00
Sanitation office.....	1,380.00		1,380.00
Sanitation stable.....	5,000.00		5,000.00
Frame building, Barrio Real.....	900.00	300.00	(1) 500.00
Road house No. 29, Carretera No. 1.....	500.00		500.00
Road house No. 30, Carretera No. 1.....	500.00		500.00
Road house No. 31, Carretera No. 1.....	500.00		500.00
Road house No. 1, Carretera No. 6.....	750.00		750.00
Road house No. 2, Carretera No. 6.....	750.00		750.00
<b>Rio Piedras:</b>			
Police barracks.....	3,600.00		3,600.00
Convalescencia Park building.....	1,439.61		1,439.61
Experimental Station buildings.....	22,162.27		22,162.27
Road house No. 5, Carretera No. 1.....	150.00		150.00
Road house No. 6, Carretera No. 1.....	160.00		160.00
Road house No. 7, Carretera No. 1.....	160.00		160.00
Road house No. 8, Carretera No. 1.....	160.00		160.00
Road house No. 9, Carretera No. 1.....	600.00		600.00
<b>Sabana Grande:</b>			
Frame building.....		40.00	40.00
Rural school, Barrio Rincon.....	250.00		250.00
<b>San Juan:</b>			
Insane asylum.....	203,240.00		203,240.00
Governor's Palace.....	159,578.72		159,578.72
Boys' charity school.....	159,340.58		159,340.58
Military hospital.....	122,180.00		122,180.00
Girls' charity school.....	88,400.00		88,400.00
Legislative assembly building.....	92,279.96		92,279.96
Penitentiary.....	92,008.50		92,008.50
Pink Palace.....	93,650.00		93,650.00
Intendencia building.....	80,150.00		80,150.00
Pabellones del Estado mayor.....	21,750.00		21,750.00
Police headquarters.....	17,600.00		17,600.00
Sanitation stables.....	10,012.93		10,012.93
Quarantine hospital.....	14,416.84		14,416.84
Office of the executive secretary of Porto Rico.....	6,580.00		6,580.00
Interior warehouse.....	3,390.89	3,690.00	7,070.89
Quartermaster's dock.....	6,020.00		6,020.00
Education warehouse.....	6,000.00		6,000.00
Insular fair buildings.....	92,680.28	1 92,680.28	
Pabellon de San Juan.....	5,340.00		5,340.00
Naval hospital.....	5,403.90	1 3,690.00	4,713.90
Sanitation offices, naval station.....	5,069.29	1 5,069.29	
Sanitation offices, leper colony.....	4,869.83		4,869.83
Captain of the port building.....	2,300.00		2,300.00
Sick animal quarantine.....	262.66		262.66
Sanitary laundry.....	920.98		920.98
Police barracks, Seboruco.....		800.00	800.00
Road house No. 1, Carretera No. 1.....	300.00		300.00
Road house No. 2, Carretera No. 1.....	350.00		350.00
Road house No. 3, Carretera No. 1.....	120.00		120.00
Road house No. 4, Carretera No. 1.....	500.00		500.00
<b>San Lorenzo:</b> Rural school, Barrio Florida.....	245.00		245.00
<b>Vega Alta:</b> Rural school, Barrio Cienegueta.....	250.00		250.00
<b>Vega Baja:</b>			
Rural school, Barrio Almirante Norte.....	250.00		250.00
Rural school, Barrio Almirante Sur.....	250.00		250.00
Rural school, Barrio Rio Prieto.....	250.00		250.00
Rural school, Barrio Sierra Alta.....	500.00		500.00
<b>Vieques:</b> Vieques jail.....	7,600.00		7,600.00
<b>Total.....</b>	<b>1,801,583.46</b>	<b>1 65,129.01</b>	<b>1,736,454.45</b>

1 Deductions.

EXHIBIT No. 13.—*Statement of accrued trust fund liabilities as of June 30, 1918.*

[Receipts and expenditures not to be confused with those on each basis, Exhibit No. 28.]

REDEMPTION FUND—ROAD IMPROVEMENT BONDS.

Balance as of July 1, 1917.....	\$813,768.75	
Property tax collections.....	228,028.50	
Delinquent taxes as of June 30, 1918.....	4,837.64	
Total.....	1,046,634.89	
Interest on \$925,000 4 per cent bonds, payable Dec. 31, 1917.....	\$18,500.00	
Interest on \$875,000 4 per cent bonds, payable June 30, 1918.....	17,500.00	
Bonds retired under sinking fund requirements Dec. 31, 1917.....	50,000.00	
Repayment of taxes improperly collected.....	69.62	
	86,069.62	
Balance as of June 30, 1918.....		\$957,563.27

MUNICIPAL BOND FUNDS.

Deduction from taxes collected for municipalities.....	68,063.64	
Interest on bonds for year.....	68,063.64	

CONSTRUCTION OF HARBOR IMPROVEMENTS AT SAN JUAN.

Balance as of July 1, 1917.....	21,070.04	
Bonds sold.....	100,270.00	
Income billed.....	10.00	
Total.....	121,350.04	
Construction work.....	21,452.19	
Balance as of June 30, 1918.....		99,897.85

SAN JUAN HARBOR FUND.

Balance as of July 1, 1917.....	82,034.63	
Miscellaneous receipts.....	23,805.50	
Interest on deferred payment of bonds sold.....	1,957.81	
	25,763.31	
Transferred from wharf and harbor fund.....	6,484.84	
Total.....	114,282.78	
Interest on \$800,000 4 per cent bonds for year.....	24,000.00	
Balance as of June 30, 1918.....		90,282.78

SCHOOL BOARD BOND FUNDS.

Deductions from taxes collected for school board.....	25,098.13	
Interest on bonds for year.....	25,098.13	

UNIVERSITY FUND.

Balance as of July 1, 1917.....	40,961.79	
Proportion of court fees and fines.....	39,281.33	
Proportion of sanitary fines.....	2,338.25	
Rent of escheated inheritance.....	1,233.54	
Rent of property.....	1,409.29	
Sale of farm products.....	2,158.18	
Sale of University land.....	1,500.00	
Miscellaneous.....	7,234.04	
	55,134.68	
Total.....	96,096.42	
Expenses.....	55,287.07	
Balance as of June 30, 1918.....		40,809.35

UNIVERSITY INCOME FUND.

Balance as of July 1, 1917.....	961.86	
Income from securities owned.....	340.64	
Balance as of June 30, 1918.....		1,302.50

ESCHEATED INHERITANCE FUND.

Balance as of June 30, 1918.....		476.65
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UNIVERSITY AGRICULTURAL FUND.

Balance as of July 1, 1917.....	2,539.48	
Federal appropriation, Morrill-Hatch Act.....	50,000.00	
Interest on bank deposits.....	606.13	
Miscellaneous receipts.....	58.57	
Total.....	53,204.18	
Expenditures.....	52,948.44	
Balance as of June 30, 1918.....		255.74

## PERMANENT UNIVERSITY FUND.

Balance as of July 1, 1917.....	\$611.98	
Interest on bank balances.....	113.55	
25 per cent sale of Government land.....	329.20	
<b>Total.....</b>	<b>1,054.73</b>	
Liberty bonds.....	\$500.00	
Share "Porto Rico Fruit Exchange".....	20.00	
	<b>520.00</b>	
<b>Balance as of June 30, 1918.....</b>		<b>\$534.73</b>

## SCHOOL BUILDING FUND.

Balance as of July 1, 1917.....	79,736.42	
Interest on loans.....	816.47	
Repayments on principal of loans.....	4,618.35	
Sale of land.....	5,000.00	
Transfer.....	5,000.00	
	<b>15,434.82</b>	
<b>Total.....</b>	<b>95,171.24</b>	
Expenditures.....	9,236.66	
Transfer.....	5,000.00	
	<b>14,236.66</b>	
<b>Balance as of June 30, 1918.....</b>		<b>80,934.58</b>

## SCHOOL EXTENSION FUND.

Balance as of June 30, 1918.....	560.40
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## IRRIGATION FUND.

<b>Construction:</b>		
Balance as of July 1, 1917.....	\$35,133.64	
Repayment of unexpended balances by special dis-		
bursing officer.....	1,500.00	
Repayment of loan from bureau of supplies.....	10,000.00	
Transfer.....	23,500.00	
Miscellaneous.....	5,877.80	
	<b>76,011.44</b>	
Construction expenditures.....	17,434.99	
Advances to special disbursing officers.....	1,500.00	
Transfers.....	53,500.00	
	<b>72,434.99</b>	
		<b>3,576.45</b>
<b>Operation:</b>		
Balance as of July 1, 1917.....	42,825.71	
Repayment of unexpended balances by special dis-		
bursing officer.....	2,500.00	
Revenues from taxation.....	307,594.70	
Interest on bank deposits.....	2,197.87	
Miscellaneous receipts.....	93,882.40	
Transfers.....	77,500.00	
Loans from insular government.....	70,000.00	
	<b>596,500.68</b>	
Operation expenses.....	117,314.19	
Bonds retired, Dec. 31, 1917.....	150,000.00	
Interest on bonds.....	201,000.00	
Advances to special disbursing officers.....	2,500.00	
Transfers.....	47,500.00	
Loan repaid to insular government.....	55,000.00	
	<b>573,314.19</b>	
		<b>23,186.49</b>
<b>Balance as of June 30, 1918.....</b>		<b>26,762.94</b>

## OUTSTANDING LIABILITIES.

Balance as of July 1, 1917.....	14,244.82	
Accounts outstanding transferred during the year.....	2,417.78	
<b>Total.....</b>	<b>16,662.60</b>	
Old accounts presented for payment.....	3,147.04	
<b>Balance as of June 30, 1918.....</b>		<b>13,515.56</b>

## REDEMPTION OF MUNICIPAL BONDS.

Balance as of July 1, 1917.....	64,961.68	
Deduction from taxes collected for municipalities.....	76,000.00	
<b>Total.....</b>	<b>140,961.68</b>	
Payments to redeem bonds.....	50,711.68	
<b>Balance as of June 30, 1918.....</b>		<b>90,250.00</b>

REDEMPTION OF SCHOOL BOARD BONDS.

Balance as of July 1, 1917.....	\$30,933.33	
Deductions from taxes collected for school boards.....	62,066.67	
Total.....	93,000.00	
Payments to redeem bonds.....	30,500.00	
Balance as of June 30, 1918.....		\$62,500.00

SANITARY FUND.

Balance as of July 1, 1917.....		1,520.83
Sanitary fines collected during year.....	\$2,338.25	
Transfer.....	743.08	
Total.....		3,061.33
Expenses.....	300.00	
Transfer.....	1,043.08	
Total.....		4,602.16
Balance as of June 30, 1918.....		3,259.08

INSULAR POLICE RELIEF FUND.

Balance as of July 1, 1917.....		3,283.81
Fines imposed on policemen.....		298.50
Liberty bonds purchased.....		2,000.00
Total.....		5,582.31
Payments to beneficiaries.....	1,104.80	
Invested in Liberty bonds.....	2,000.00	
Total.....		3,104.80
Balance as of June 30, 1918.....		2,477.51

SALE OF ARTICLES, GIRLS' CHARITY SCHOOL.

Balance as of July 1, 1917.....		1,437.72
Sale of articles.....		693.90
Total.....		2,131.62
Expenses.....		708.30
Balance as of June 30, 1918.....		1,423.32

SALE OF ARTICLES AND WORK DONE, BOYS' CHARITY SCHOOL.

Balance as of July 1, 1917.....		2,247.25
Sale of articles, band concerts, etc.....		502.84
Total.....		2,750.09
Expenses.....		480.03
Balance as of June 30, 1918.....		2,270.06

SALE OF ARTICLES, PENITENTIARY.

Balance as of July 1, 1917.....		4,164.28
Sale of articles.....		395.74
Total.....		4,560.02
Expenses.....		639.52
Balance as of June 30, 1918.....		3,920.50

BOYS' CHARITY SCHOOL RECREATION FUND.

Balance as of July 1, 1917.....		945.44
50 per cent of receipts from band concerts.....		420.00
Total.....		1,365.44
Expenses.....		96.33
Balance as of June 30, 1918.....		1,269.11

SECURITIES REFUNDING BONDS.

Balance as of June 30, 1918.....		1,260,500.00
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SECURITIES LOAN FUND.

Balance as of June 30, 1918.....		401,000.00
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## WORKMAN'S RELIEF TRUST FUND.

Balance as of July 1, 1917.....	\$41,014.40	
Collections during year.....	48,790.58	
Repayment of unexpended balance by special disbursing officer.....	200.00	
<b>Total</b> .....		90,005.07
Advances to special disbursing officers.....	\$200.00	
Expenditures.....	55,313.84	
		<u>55,313.84</u>
Balance as of June 30, 1918.....		\$34,491.23

## LA EGIDA DEL MAESTRO.

Balance as of July 1, 1917.....	351.45	
Collections during year.....	675.67	
Balance as of June 30, 1918.....		1,027.12

## ROAD BOND FUND OF 1916.

Balance as of July 1, 1917.....	480,685.95	
Repayment of unexpended balances by special disbursing officer.....	1,768.63	
Transfers.....	476,208.08	
<b>Total</b> .....		957,662.66
Advances to special disbursing officers.....	17,550.00	
Expenses.....	292,599.28	
Transfers.....	476,208.08	
		<u>796,357.36</u>
Balance as of June 30, 1918.....		181,305.30

## SALE OF ARTICLES AND WORK DONE, REFORM SCHOOL.

Balance as of July 1, 1917.....	16.00	
Sale of articles.....	15.14	
Balance as of June 30, 1918.....		31.14

## RECREATION FUND, REFORM SCHOOL.

Balance as of July 1, 1917.....	8.00	
50 per cent of receipts from sale of articles.....	15.93	
Balance as of June 30, 1918.....		23.93

## WHARF AND HARBOR FUND.

Balance as of July 1, 1917.....	2,806.30	
Collections during the year.....	7,810.28	
<b>Total</b> .....		10,316.58
Expenses.....	\$3,831.74	
Transferred to San Juan Harbor fund.....	6,484.84	
		<u>10,316.58</u>

## MARKET FOR FOOD COMMISSION.

Appropriated by food commission.....	2,868.14	
Repayment of unexpended balance by special disbursing officer.....	575.14	
<b>Total</b> .....		3,443.28
Advance to special disbursing officer.....	1,200.00	
Expenses.....	1,526.73	
		<u>2,726.73</u>
Balance as of June 30, 1918.....		716.55

## SALE OF FARM PRODUCTS.

Sale of farm products, insular experimental station.....	3,620.01	
Balance as of June 30, 1918.....		3,620.01

## MUNICIPAL BOND REDEMPTION TAX.

Balance as of July 1, 1917:		
San Juan.....	21,394.47	
Barranquitas.....	477.71	
Guayama.....	6,327.37	
Maunabo.....	2,000.00	
Arroyo.....	1,000.00	
		<u>31,199.55</u>

Collections during the year:

San Juan.....	\$66,029.00	
Ponce.....	2.37	
Arecibo.....	12.72	
Barranquitas.....	960.51	
Guayama.....	4,915.67	
Maunabo.....	1,681.09	
Arroyo.....	1,641.17	
San Juan (special).....	27,633.37	
		<u>\$132,775.90</u>

Total..... 163,975.45

Expenditures:

San Juan.....	48,327.19	
Ponce.....	2.37	
Arecibo.....	12.72	
Barranquitas.....	837.71	
Guayama.....	6,133.11	
Maunabo.....	337.50	
Arroyo.....	1,472.50	
San Juan (special).....	9,014.19	
		<u>66,137.29</u>

Balance as of June 30, 1918:

San Juan.....	69,096.28	
Barranquitas.....	500.51	
Guayama.....	5,109.93	
Maunabo.....	3,343.59	
Arroyo.....	1,168.67	
San Juan (special).....	18,619.18	

\$97,838.16

MISCELLANEOUS TRUST FUNDS.

United States Government (account of firearms).....	307.20	
Expenses sale of Government property.....	334.91	
Homestead trust fund.....	303.42	
		<u>945.53</u>

Total trust-fund balances..... 3,461,764.90



## EXHIBIT No. 14.—Interest-bearing indebtedness of the insular government, June 30, 1918.—Bond issues.

Authorization.	Description.	Date of—		Rate of interest, per cent.	Amount—			Interest payable.	Balance in sinking fund June 30, 1918.
		Issue.	Maturity.		Author-ized.	Issued.	Out-standing.		
Act Mar. 8, 1906 and Feb. 13, 1907.	Road construction, series of \$50,000, payable yearly, beginning Jan. 1, 1908.	Jan. 1, 1907	Jan. 1, 1927	4	\$1,000,000	\$1,000,000	\$450,000	Jan. 1, July 1	\$231,000.00
Act No. 25, Mar. 10, 1910.	Road construction, redeemable after Jan. 1, 1920.	Jan. 1, 1910	...do.....	4	425,000	425,000	425,000	do.....	421,725.63
Act Sept. 15, 1908	Irrigation series of \$150,000, payable yearly after 5 years.	Jan. 1, 1909	Jan. 1, 1923	4	3,000,000	3,000,000	2,250,000	do.....	.....
Act No. 74, Mar. 9, 1911.	Irrigation, redeemable after Jan. 1, 1933.	Jan. 1, 1913	Jan. 1, 1943	4	1,000,000	1,000,000	1,000,000	do.....	.....
Act No. 128, Aug. 8, 1913.	Irrigation, series of \$100,000, payable yearly, beginning Jan. 1, 1944.	Oct. 1, 1913	Jan. 1, 1950	4	1,700,000	1,700,000	700,000	do.....	.....
Act No. 128, Aug. 8, 1913; J. R. No. 12, Mar. 28, 1914.	Irrigation, series of \$100,000, payable yearly, beginning Jan. 1, 1931.	Jan. 1, 1914	Jan. 1, 1934	4	150,000	400,000	400,000	do.....	.....
Act No. 128, Aug. 8, 1913.	Irrigation, series of \$100,000, payable yearly, beginning Jan. 1, 1935.	July 1, 1915	Jan. 1, 1938	4	.....	400,000	400,000	do.....	.....
Do.	Irrigation, series of \$100,000, payable yearly, beginning Jan. 1, 1939.	Jan. 1, 1916	Jan. 1, 1940	4	.....	200,000	200,000	do.....	.....
Act No. 45, Mar. 7, 1912.	San Juan Harbor Improvement, first issue, redeemable after 10 years from date of issue.	Jan. 1, 1912	Jan. 1, 1927	4	500,000	100,000	100,000	do.....	.....
Do.	San Juan Harbor Improvement, second issue, redeemable after 10 years from date of issue.	Jan. 1, 1914	Jan. 1, 1929	4	.....	200,000	200,000	do.....	90,282.78
Do.	San Juan Harbor Improvement, third issue, redeemable after 10 years from date of issue.	Jan. 1, 1915	Jan. 1, 1940	4	.....	200,000	200,000	do.....	.....
Act No. 23, Apr. 12, 1917.	San Juan Harbor Improvement, redeemable after 10 years from date of issue.	Jan. 1, 1917	Jan. 1, 1942	4	100,000	100,000	100,000	do.....	.....
Act No. 120, July 26, 1913.	Reunding bonds, first series of \$100,000 due July 1, 1923.	Jan. 1, 1914	July 1, 1923	4	1,000,000	655,000	655,000	do.....	.....
Do.	Reunding bonds, first series of \$21,000 payable July 1, 1919.	July 1, 1915	July 1, 1925	4	300,000	300,000	300,000	do.....	.....
Do.	Reunding bonds, series of \$30,000 payable yearly beginning July 1, 1918.	July 1, 1916	July 1, 1927	4	300,000	300,000	270,000	do.....	.....
Act No. 23, Mar. 28, 1914.	Public improvement bonds, redeemable on Public Jan. 1, 1923.	Jan. 1, 1914	Jan. 1, 1929	4	1,000,000	1,000,000	1,000,000	do.....	.....
Act No. 71, Apr. 13, 1916.	Public improvement bonds, first series of \$100,000 redeemable on Jan. 1, 1927.	Jan. 1, 1916	Jan. 1, 1920	4	2,000,000	500,000	500,000	do.....	.....
Total bonded indebtedness.	.....	.....	.....	.....	12,475,000	10,480,000	9,150,000	.....	1,043,008.41
Temporary loan from the Mechanics & Metals National Bank of New York.	.....	.....	.....	.....	.....	.....	400,000	.....	.....
Temporary loans to provide funds for the food commission under joint resolution No. 10, approved Apr. 12, 1917:	.....	.....	.....	.....	.....	.....	.....	.....	.....
From American Colonial Bank of Porto Rico.	.....	.....	.....	.....	.....	.....	.....	.....	.....
From Banco Territorial y Agrícola, San Juan, Porto Rico.	.....	.....	.....	.....	.....	.....	.....	.....	.....
From Banco Comercial de Puerto Rico.	.....	.....	.....	.....	.....	.....	350,000	.....	.....
Total indebtedness.	.....	.....	.....	.....	12,475,000	10,480,000	9,900,000	.....	1,043,008.41

EXHIBIT No. 15.—*University of Porto Rico—Balance sheet, June 30, 1918.*

ASSETS.		
<b>Cash in hands of treasurer of Porto Rico:</b>		
University fund, trust fund.....	\$40,800.40	
University agricultural fund.....	255.74	
Permanent university fund.....	534.73	
University income fund.....	1,302.50	
Expenses University of Porto Rico, 1917-18.....	500.01	
		\$43,402.38
<b>Trust fund asset: Cash in hands of secretary-treasurer, University of Porto Rico.....</b>		
Expense inventory: Teachers' salary paid in advance.....		1,399.55
Accounts receivable: Due from B. S. P. & T. over payment voucher 172.....		145.83
		58.07
<b>Securities purchased:</b>		
Liberty bonds.....	300.00	
Pedueñas bonds.....	10,000.00	
Porto Rico Fruit Exchange stock.....	20.00	
		10,320.00
<b>Real estate and improvements:</b>		
Normal and practice buildings.....	121,101.98	
Sites and grounds.....	38,052.75	
University farm.....	14,907.60	
		174,062.33
<b>Miscellaneous equipment, Rio Piedras:</b>		
Athletic and military supplies.....	1,844.86	
Equipment.....	12,620.91	
Furniture and fixtures.....	15,451.62	
Live stock.....	300.00	
Machinery and tools.....	7,600.82	
Reference and library books.....	6,257.12	
Textbooks.....	7,925.94	
Vehicles and harness.....	264.23	
		52,265.50
<b>Miscellaneous equipment, Mayaguez:</b>		
Athletic and military supplies.....	918.14	
Equipment.....	21,474.41	
Furniture and fixtures.....	11,797.17	
Live stock.....	2,128.51	
Machinery and tools.....	17,045.74	
Reference and library books.....	5,203.28	
Textbooks.....	2,649.30	
Vehicles and harness.....	2,299.92	
		63,516.47
		<u>345,170.22</u>
LIABILITIES AND CAPITAL.		
<b>Liabilities:</b>		
Muñoz Rivera, memorial fund.....	\$508.85	
Uniform fund.....	890.70	
		1,399.55
<b>Capital: Trustees, University of Porto Rico (present worth).....</b>		
		<u>343,770.67</u>
		345,170.22

EXHIBIT No. 16.—*University of Porto Rico—Surplus account, June 30, 1918.*

Balance as of July 1, 1917.....		\$366,138.78
<b>Appropriations:</b>		
Morrill-Hatch account.....	\$50,000.00	
University of Porto Rico, normal.....	50,000.00	
Construction and improvements, University of Porto Rico No. F. Y.....	140.73	
		100,140.73
<b>Revenues:</b>		
Court fines and fees.....	43,630.27	
Escheated inheritance.....	1,224.00	
Interest on above.....	9.64	
Sale of public lands (25 per cent).....	329.20	
		45,198.01
<b>Other income:</b>		
Matriculations liberal arts.....	60.00	
Tuition, law.....	750.00	
Tuition, pharmacy.....	242.50	
Sale of farm produce.....	2,471.98	
Rents.....	1,411.29	
Laboratory fees.....	185.75	
Library fines.....	9.64	
Special tuition fees.....	25.00	
Interest on securities purchased.....	454.19	
Interest on Government deposits July 1, 1917, to June 30, 1918.....	608.13	
		6,216.48
Net gain on property sold.....		12.73
Gifts and bequest of property.....		1,049.31
		<u>518,751.09</u>

This amount is \$208.90 more than that shown in Exhibit No. 1 due to having included in Exhibit No. 15 \$145.83 representing teachers' salaries paid in advance and \$58.07 overpaid to the Bureau of Supplies, Printing and Transportation, voucher No. 172.

**EXHIBIT No. 16.—University of Porto Rico—Surplus account, June 30, 1918—Contd.**

<b>Operating expenses as per Schedule A:</b>	
College of Agriculture and Mechanic Arts.....	\$54,056.80
Normal College.....	31,493.58
College of Liberal Arts.....	6,561.74
College of Law.....	8,375.51
College of Pharmacy.....	6,786.79
University High School.....	24,857.22
Supervision of public schools.....	4,330.00
Administration of office.....	3,739.68
	<b>\$140,201.32</b>
Balance of appropriation written off.....	45.07
Unexpendable property transferred to the people of Porto Rico.....	2,575.18
Depreciation (condemned property).....	4,179.58
Deductions from assets for adjustment of book accounts to inventory as of July 1, 1917.....	27,979.27
	<b>34,779.10</b>
Surplus as of June 30, 1918.....	<b>243,770.67</b>
	<b>518,751.09</b>

**SCHEDULE A.—University of Porto Rico—Detailed statement of operating expenses for the year ending June 30, 1918.**

<b>College of Agriculture &amp; Mechanic Arts:</b>	
Salaries of teachers.....	\$29,183.61
Other salaries and wages.....	6,711.49
Repairs and maintenance.....	4,473.46
Office supplies and expenses.....	597.60
School supplies.....	9,571.95
Farm expenses.....	2,085.98
Telephone, telegraph, and cable.....	104.20
Light and water.....	263.92
Travel.....	208.97
Catalog.....	50.00
Maintenance coffee farm.....	800.62
	<b>\$54,056.80</b>
<b>Normal College, Rio Piedras:</b>	
Salaries of teachers.....	20,137.50
Other salaries and wages.....	5,723.39
Light and water.....	141.71
Repairs and maintenance.....	3,021.72
Office supplies and expenses.....	300.20
School supplies.....	1,896.72
Catalog.....	233.33
Travel.....	11.22
Telephone and telegraph.....	27.79
	<b>31,493.58</b>
<b>College of Liberal Arts:</b>	
Salaries of teachers.....	4,903.80
Other salaries and wages.....	1,048.64
Office supplies and expenses.....	46.91
School supplies.....	270.05
Repairs and maintenance.....	263.64
Light and water.....	9.50
Catalog.....	16.26
Telephone and telegraph.....	2.14
Travel.....	.81
	<b>6,561.74</b>
<b>College of Law:</b>	
Salaries of teachers.....	6,032.68
School supplies.....	222.46
Other salaries and wages.....	1,354.27
Repairs and maintenance.....	644.76
Office supplies and expenses.....	54.64
Light and water.....	21.51
Telephone and telegraph.....	5.16
Travel.....	1.91
Catalog.....	38.12
	<b>8,375.51</b>
<b>College of Pharmacy:</b>	
Salaries of teachers.....	3,897.65
Other salaries and wages.....	1,074.89
School supplies.....	1,214.17
Repairs and maintenance.....	544.14
Office supplies and expenses.....	24.52
Light and water.....	11.14
Telephone and telegraph.....	2.57
Catalog.....	16.82
Travel.....	.89
	<b>6,786.79</b>

**SCHEDULE A.—University of Porto Rico—Detailed statement of operating expenses for the year ending June 30, 1918—Continued.**

<b>University High School:</b>		
Salaries of teachers.....	\$14,960.71	
Other salaries and wages.....	4,459.27	
School supplies.....	1,762.40	
Repairs and maintenance.....	2,988.24	
Office supplies and expenses.....	294.61	
Light and water.....	125.35	
Telephone and telegraph.....	27.35	
Travel.....	11.02	
Catalog.....	228.27	
		<b>\$24,857.22</b>
<b>Administration:</b>		
Salaries and wages.....	3,247.85	
Travel.....	253.12	
Office supplies and maintenance.....	196.63	
Telephone and telegraph.....	42.08	
		<b>3,739.68</b>
<b>Supervision of public schools.....</b>		<b>4,330.00</b>
<b>Total.....</b>		<b>140,201.32</b>

**EXHIBIT No. 17.—University of Porto Rico—Statement of additions to capital accounts for the period from July 1, 1917, to June 30, 1918.**

	Total, July 1, 1917.	Net additions or deductions during the year.	Total June 30, 1918.
Real estate, improvements, sites, and grounds, Rio Piedras...	\$38,062.75		\$38,062.75
Buildings, Rio Piedras:			
Normal, practice, etc.....	120,959.66	\$142.32	121,101.98
University farm.....	14,907.60		14,907.60
<b>Total.....</b>	<b>173,920.01</b>	<b>142.32</b>	<b>174,062.33</b>
<b>Miscellaneous equipment:</b>			
Athletic and military supplies.....	2,942.52	<sup>1</sup> 179.43	2,763.09
Equipment, laboratory.....	31,215.69	2,879.63	34,095.32
Furniture and fixtures.....	29,816.22	<sup>1</sup> 2,567.43	27,248.79
Live stock.....	6,261.63	<sup>1</sup> 3,833.12	2,428.51
Machinery and tools.....	9,705.16	14,941.40	24,646.56
Reference and library books.....	47,348.97	<sup>1</sup> 35,888.57	11,460.40
Textbooks.....	7,672.49	2,902.75	10,575.24
Vehicles and harness.....	2,330.05	234.10	2,564.15
<b>Total.....</b>	<b>137,292.73</b>	<b><sup>1</sup> 21,510.67</b>	<b>115,782.06</b>
<b>Total real estate and equipment.....</b>	<b>311,212.74</b>	<b>21,368.35</b>	<b>289,844.39</b>

<sup>1</sup> Deduction.

EXHIBIT No. 18.—*University of Porto Rico, amended balance sheet, June 30, 1918.*

[Assuming 50 per cent will be written off for depreciation on miscellaneous equipment.]

ASSETS.	
Total assets per Exhibit 15.....	\$345,170.22
LIABILITIES.	
Trust fund liabilities per Exhibit 15.....	1,399.55
Reserve for depreciation of miscellaneous equipment.....	55,340.23
Capital, board of trustees.....	288,430.44
	<u>345,170.22</u>

## ANALYSIS OF PROFIT AND LOSS ACCOUNT.

## Statement of income and expenditures:

Debits—	
Operation expenses, Exhibit 16.....	\$140,201.32
Depreciation, Exhibit 16.....	4,179.58
Surplus for period.....	7,182.10
Credits—	
Insular and Federal appropriations, Exhibit 16.....	100,140.73
Net gain on property sold.....	12.78
Revenues, Exhibit 16.....	45,193.01
Other income, Exhibit 16.....	6,216.48
	<u>151,563.00</u> <u>151,563.00</u>

## SURPLUS ACCOUNT.

Debits:	
Deductions from assets for adjustment of property accounts to inventory of June 30, 1917, Exhibit 16.....	27,979.27
Unexpended property transferred to the people of Porto Rico, Exhibit 16..	2,575.18
50 per cent depreciation on miscellaneous equipment of \$110,680.47.....	55,340.23
Balance of appropriation written off, Exhibit 16.....	45.07
Net surplus as of June 30, 1918, as per amended balance sheet.....	288,430.44
Credits:	
Balance as of July 1, 1917.....	396,128.78
Gifts and bequests.....	1,049.31
Surplus for period (excess of income over expenditures).....	7,182.10
Total.....	<u>374,370.19</u> <u>374,370.19</u>

EXHIBIT No. 19.—Statement showing the amount of taxes pending on June 30, 1918, for fiscal years 1901-2 to 1917-18, percentage and reasons why they are pending.

Municipality.	1901-2	1902-3	1903-4	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10	1910-1911	1911-12	1912-13
Adjuntas.....												
Aguada.....												
Aguadilla.....												
Agua Buenas.....											\$1.44	\$1.44
Albionito.....												
Añasco.....												
Arecibo.....												
Arroyo.....												
Barceloneta.....												
Barranquitas.....												
Barros.....												
Bayamon.....												
Cabo Rojo.....												
Caguas.....												
Canuy.....												
Carolina.....												
Cayey.....												
Ceiba.....												
Ciales.....												
Cidra.....												
Coamo.....												
Comerio.....												
Concepcion.....												
Culebra.....												
Dorado.....	\$4.00	\$4.20	\$4.00	\$4.00	\$4.18	\$4.62	\$4.62	\$4.62	\$4.68	\$4.68	4.68	11.76
Guadalupe.....												
Guayama.....												
Guayanilla.....												
Guaynabo.....												
Guirabo.....												
Hatillo.....												
Hormigueros.....												
Humacao.....												
Isabela.....												
Jayuya.....												
Juncos.....												
Juana Diaz.....												
Lajas.....												
Lares.....												
Las Marias.....												
Las Piedras.....												
Lotia.....												

EXHIBIT No. 19.—Statement showing the amount of taxes pending on June 30, 1918, for fiscal years 1901-2 to 1917-18, percentage and reasons why they are pending—Continued.

Municipality.	1901-2	1902-3	1903-4	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10	1910-1911	1911-12	1912-13
Laguaillo.....												
Manati.....											\$1.20	
Maricao.....												
Mamabo.....												
Mayaguez.....												\$13.16
Moca.....												
Moravia.....												
Naguabo.....												
Naranjo.....												
Patillas.....												
Petillas.....												
Ponce.....												
Quebradillas.....												
Rio Grande.....												
Rio Piedras.....												10.32
Sabana Grande.....												
Salinas.....												
San German.....												
San Juan.....					\$39.30	\$38.12	\$38.12	\$38.06	\$66.08	\$177.92	136.38	96.44
San Lorenzo.....												
San Sebastian.....												
Santa Isabel.....												
Toa Alta.....												
Toa Baja.....												
Trujillo Alto.....												
Utrero.....	\$34.96	\$68.52	\$44.80	\$53.06	5.40	5.90	6.72	6.60	6.72	2.40		
Vega Alta.....							2.54	2.52	2.52	2.88	3.12	3.12
Vega Baja.....												
Vieques.....												
Villalba.....												
Yabucoa.....												
Yauco.....	48.50	91.26	151.26									
Corporations.....												
Total.....	87.46	153.98	200.06	37.12	48.88	48.64	52.00	51.82	80.00	187.88	146.82	435.24





EXHIBIT No. 19.—Statement showing the amount of taxes pending on June 30, 1918, for fiscal years 1901-2 to 1917-18, percentage and reasons why they are pending—Continued.

Municipality.	1913-14	1914-15	1915-16	1916-17	Total.	1917-18	Grand total.	Per cent pending June 30, 1918, for all fiscal years.	Pending judicial action.	Payments extended.	Probably uncollectible.	In claims.
Lares.	\$4.20			\$2.18	\$6.38	\$72.78	\$6.38	(1)			\$6.38	\$410.54
Las Marias.		\$2.16		427.34	602.18		1,331.96	\$0.005		\$220.22	1.30	
Las Piedras.					2.16	112.40	112.40	(1)			4.48	
Ledra.		\$2.16				2,112.74	2,112.74	(1)		85.26	6.90	21.68
Laguailo.						2,212.70	2,212.70	(1)				
Manatí.	70.68			15.06	87.54	268.82	356.36	(1)	\$12.00	98.58	22.02	1.44
Maricao.						5.06	5.06	(1)		268.82	4.20	
Martorel.	4.20				4.20	642.90	642.90	(1)	313.16	6.06		3.36
Mayaguez.	13.36	51.54	66.96	28.28	473.30	58.22	1,116.20	(1)		639.54	180.14	
Morovis.						2.40	2.40	(1)		2.40		
Naguabo.	36.92	54.66	6.00		97.58	3,718.08	3,815.66	(1)			105.50	3,710.16
Namiquito.		1.56			1.56	4.80	6.36	(1)			1.56	4.80
Patillas.		3.24		2.18	7.22	1.56	8.78	(1)			30.44	
Penuelas.	13.20		7.80	9.44	30.44		30.44	(1)		1,085.88	402.76	3.00
Ponce.	96.86	96.06	139.70	73.14	405.76	1,085.88	1,491.64	(1)			17.70	3.48
Quebradillas.			7.62	8.28	15.90	22.80	38.70	(1)				
Rincon.								(1)				
Rio Grande.	30.12	98.36	7.20		136.68	79.80	216.48	(1)		76.20	136.68	3.60
Rio Piedras.	34.74	39.24	38.28	78.11	200.69	191.04	391.73	(1)		98.28	259.09	38.76
Sabana Grande.			12.00		12.00		12.00	(1)			12.00	
Salinas.					9.90	60.00	69.90	(1)			69.90	
San German.	121.08	11.68	4.20		136.86	55.74	192.60	(1)		55.74	136.86	
San Juan.	1,241.83	1,957.77	1,250.56	1,889.83	7,019.43	4,569.83	11,589.26	(1)		4,772.12	6,806.06	12.00
San Lorenzo.						8.40	8.40	(1)		8.40		
San Sebastian.		36.00	36.00	21.76	98.76	399.54	498.30	(1)		399.22	104.08	
Santa Isabel.						566.64	566.64	(1)	8.40	568.24		
Tos Alta.				31.33	31.33	32.88	64.21	(1)		30.48	33.78	1.20
Tos Baja.				6.10	6.10	15.36	21.46	(1)			20.26	
Trujillo Alto.	3.24	1.20	4.80		9.24	12.00	21.24	(1)	12.00		9.24	
Utuado.	27.60	8.28	21.48	28.04	85.40	499.66	730.14	(1)		425.16	76.18	228.80
Vega Alta.	3.12	3.12	6.72	3.76	16.72	40.88	74.12	(1)		62.96	11.16	
Vega Baja.	36.00		25.92	61.92		8.40	70.32	(1)	36.00		34.32	
Vieques.												
Villalba.												
Yabucoa.	18.84	24.00		16.68	59.52		59.52	(1)			59.52	
Yauco.	3.00	7.50	15.00		25.50	6.60	32.10	(1)			32.10	
Corporations.	299.71	992.07	1,760.49	1,527.34	4,810.63	11,880.68	16,691.31	.123	11,491.53	3,063.29	1,896.28	291.02
Total.	2,514.10	3,785.51	3,873.51	4,549.16	16,262.17	46,194.37	62,376.54	.066	11,940.50	16,344.27	12,131.12	21,980.66

1 Pending less than 0.001 per cent.

EXHIBIT 19-A.—Property valuation and taxes for the fiscal year 1917-18, on June 30, 1918.

Municipality.	Valuation.			Rate.	Total.	Of private property.	Of corporation property.	Total.	Taxes.					
	Of private property.	Of corporation property.	Total.						Insular, at 0.10 per cent.	Municipal, at 0.80 per cent.	Schools.		Road loan, at 0.10 per cent.	Municipal loan.
											Rate.	Amount.		
Adjuntas.....	\$2,089,590	\$43,900	\$2,133,500	1.20	\$25,075.08	\$765.60	\$25,840.68	\$2,153.39	\$19,380.51	P. ct.	\$2,153.39	\$2,153.39		
Aguada.....	2,098,905	44,021	2,142,926	1.20	25,186.96	528.26	25,715.22	2,142.93	19,296.34	10	2,142.92	2,142.93		
Aguadilla.....	2,458,775	69,254	2,528,029	1.20	29,481.30	831.08	30,312.38	2,458.03	22,734.26	10	2,458.03	2,458.03		
Agua Buenas.....	760,647	54,840	815,487	1.20	9,127.78	653.08	9,780.86	815.49	7,339.36	10	815.49	815.49		
Aibonito.....	1,085,815	316,636	1,402,451	1.20	13,150.92	3,799.66	16,950.58	1,412.54	12,712.94	10	1,412.55	1,412.55		
Aiaco.....	2,031,855	301,711	2,333,566	1.20	24,392.26	3,620.58	28,012.84	2,333.57	21,092.13	10	2,333.57	2,333.57		
Arco.....	3,593,194	8,593,194	10,286,404	1.20	80,666.64	42,746.34	123,412.98	10,286.42	92,559.74	10	10,286.41	10,286.41		
Arroyo.....	1,983,025	190,694	2,173,719	(1)	25,075.62	2,395.90	27,471.52	2,174.14	19,587.24	0.8	1,087.07	2,852.07		
Barceloneta.....	1,286,820	1,565,246	2,852,066	1.20	15,441.84	18,783.02	34,224.86	2,852.07	25,668.64	10	2,852.08	2,852.07		
Barraquitas.....	666,600	1,667,500	2,334,100	(2)	8,712.96	6.76	8,719.72	667.46	6,007.14	10	667.46	667.46		
Barros.....	1,086,960	1,086,960	2,173,920	1.20	13,043.88	13,043.88	26,087.76	1,086.96	9,733.91	10	1,086.96	1,086.96		
Bayamon.....	3,969,970	1,267,402	5,237,372	1.20	47,639.64	15,206.94	62,846.58	5,237.38	47,136.44	10	5,237.38	5,237.38		
Cabo Rojo.....	2,569,352	228,871	2,798,223	1.20	30,822.72	2,866.46	33,689.18	2,569.37	25,274.39	10	2,569.38	2,569.38		
Caguas.....	4,296,326	1,904,705	6,141,031	1.20	60,860.92	22,856.50	83,717.42	6,143.03	55,287.31	10	6,143.04	6,143.04		
Camuy.....	4,000,769	1,000,989	5,001,758	1.20	18,811.56	4,800.26	23,611.82	4,000.77	17,715.62	10	4,000.78	4,000.78		
Carolina.....	2,567,710	1,000,078	3,567,788	1.175	27,502.74	11,750.96	39,253.70	3,540.74	30,066.67	0.75	3,267.75	3,340.74		
Cayey.....	2,413,910	843,839	3,257,749	1.20	28,966.52	1,058.10	30,024.62	3,267.75	26,819.77	10	3,267.75	3,267.75		
Cayey.....	847,465	88,234	935,699	1.20	10,169.58	1,058.52	11,228.10	935.70	8,421.30	10	935.70	935.70		
Cidra.....	2,132,750	3,852	2,136,602	1.20	25,968.00	46.24	26,014.24	2,136.61	19,220.43	10	2,136.60	2,136.60		
Cidra.....	2,132,750	3,852	2,136,602	1.20	25,968.00	46.24	26,014.24	2,136.61	19,220.43	10	2,136.60	2,136.60		
Coamo.....	1,919,450	212,100	2,131,550	1.20	11,033.40	2,545.22	13,578.62	1,919.45	10,133.97	10	1,919.45	1,919.45		
Comerio.....	880,225	4,190	884,415	1.20	22,737.24	50.28	22,787.52	1,968.96	17,090.64	10	1,968.96	1,968.96		
Corozal.....	1,213,662	1,213,662	2,427,324	1.20	10,692.70	14,563.98	25,256.68	2,103.89	18,935.01	10	2,103.89	2,103.89		
Culebra.....	820,050	1,150	821,200	1.00	9,843.84	13.80	9,857.64	821.47	7,383.23	(1)	821.47	821.47		
Dorado.....	2,289,506	396,315	2,685,821	1.20	14,874.06	4,635.80	19,509.86	2,200.50	14,632.40	(2)	1,625.82	1,625.82		
Fajardo.....	1,713,196	1,713,196	3,426,392	1.20	33,994.78	20,556.38	54,551.16	4,546.10	40,914.87	10	4,546.10	4,546.10		
Guadalupe.....	2,832,897	4,258,956	7,091,853	1.20	7,883.64	51,107.48	58,991.12	4,915.93	44,243.34	10	4,915.92	4,915.93		
Guánica.....	656,970	4,258,956	4,915,926	1.20	7,883.64	51,107.48	58,991.12	4,915.93	44,243.34	10	4,915.92	4,915.93		

1 For Arroyo the total rate is 1.25 per cent on rural property and 1.31 per cent on urban property, being the rate of municipal bond redemption tax, 0.10 per cent on the rural and 0.10 on the urban.  
 2 For Aguadilla the total rate is 1.30 per cent on rural property and 1.35 per cent on urban property, being the rate of municipal bond redemption tax, 0.10 per cent on the rural and 0.15 per cent on the urban.  
 3 Insular at 1 per cent.

EXHIBIT 19-A.—Property valuation and taxes for the fiscal year 1917-18, on June 30, 1918—Continued.

Municipality.	Valuation.		Total.	Rate.	Of private property.	Of corporation property.	Total.	Taxes.							
	Of private property.	Of corporation property.						Insular, at 0.10 per cent.	Municipal, per cent.	Distribution.		Road loan, at 0.10 per cent.	Municipal loan.		
										Schools.	Rate.			Amount.	
			P. c.					P. c.							
Guayama.....	\$5,676,066	\$33,821	\$5,710,487	1.32	\$74,940.78	\$446.48	\$75,387.26	\$5,711.15	\$51,400.40		\$5,711.16	\$6,853.39		\$6,711.16	
Guayanilla.....	1,899,150	140,715	2,039,865	1.20	22,789.90	1,688.56	24,478.38	2,039.86	18,358.78	10	2,039.87	2,039.87		2,039.87	
Guaynabo.....	816,422	359,781	1,176,203	1.20	9,797.06	4,317.42	14,114.50	1,176.21	10,593.87	10	1,176.21	1,176.21		1,176.21	
Gurabo.....	1,020,445	509,042	1,529,487	1.20	12,245.34	6,108.52	18,353.86	1,529.49	13,765.39	10	1,529.49	1,529.49		1,529.49	
Hatillo.....	1,574,200	55,070	1,629,270	1.20	18,800.40	660.86	19,551.26	1,629.27	14,663.45	10	1,629.27	1,629.27		1,629.27	
Hormigueros.....	806,496	343,284	1,149,779	1.20	9,677.94	4,119.42	13,797.36	1,149.78	10,348.02	10	1,149.78	1,149.78		1,149.78	
Humacao.....	2,803,180	1,809,943	4,613,123	1.20	33,638.16	21,719.36	55,357.52	4,613.13	41,518.14	10	4,613.13	4,613.13		4,613.13	
Isabela.....	1,480,015	29,709	1,509,724	1.20	17,760.18	358.52	18,118.70	1,509.73	13,587.52	10	1,509.73	1,509.73		1,509.73	
Jayuya.....	1,319,260	104,550	1,423,800	1.20	16,831.00	1,254.60	18,085.60	1,423.80	12,814.20	10	1,423.80	1,423.80		1,423.80	
Juana Diaz.....	3,329,470	968,013	4,297,483	1.20	36,963.64	11,466.16	51,449.80	4,297.48	38,587.35	10	4,297.48	4,297.48		4,297.48	
Juncos.....	1,120,670	2,251,368	3,372,038	1.20	13,448.04	13,568.28	27,016.32	2,251.36	20,262.24	10	2,251.36	2,251.36		2,251.36	
Lajas.....	2,158,500	89,769	2,248,269	1.20	26,902.00	1,077.24	28,979.24	2,248.27	20,234.43	10	2,248.27	2,248.27		2,248.27	
Lares.....	2,663,188	68,058	2,731,243	1.20	31,968.22	1,816.72	33,774.94	2,731.25	24,581.20	10	2,731.25	2,731.25		2,731.25	
Las Marias.....	1,607,380		1,607,380	1.20	19,288.56		19,288.56	1,607.38	14,466.42	10	1,607.38	1,607.38		1,607.38	
Las Piedras.....	394,997		7,737.78	1.20		4,789.98	12,477.76	1,039.81	9,368.32	10	1,039.81	1,039.81		1,039.81	
Lola.....	2,068,217	1,386,217	3,454,337	1.20	22,621.98	15,261.40	37,903.38	3,445.76	31,011.86	10	3,445.76	3,445.76		3,445.76	
Luquillo.....	1,068,920	136,913	1,205,833	1.20	12,827.04	1,511.00	14,338.04	1,194.84	10,173.58	10	1,194.84	1,194.84		1,194.84	
Manati.....	3,317,780	219,382	3,537,162	1.20	36,813.36	2,632.64	42,446.00	3,537.16	31,894.50	10	3,537.17	3,537.17		3,537.17	
Maricao.....	1,619,740	7,000	1,626,740	1.20	16,436.88	84.00	16,520.88	1,626.74	14,640.66	10	1,626.74	1,626.74		1,626.74	
Mauabo.....	1,022,653		1,026,806	(1)	13,947.32	58.10	14,005.42	1,027.03	9,243.21	10	1,027.02	1,027.02		1,027.02	
Mayaguez.....	8,550,078	1,032,951	9,583,029	1.20	102,600.94	12,365.52	114,966.46	9,583.04	86,247.34	10	9,583.04	9,583.04		9,583.04	
Moca.....	946,544	54,143	1,000,687	1.20	11,368.64	46.52	11,415.16	1,000.69	9,006.19	10	1,000.69	1,000.69		1,000.69	
Morovis.....	931,120	3,876	934,996	1.20	11,173.44	46.52	11,219.96	934.99	8,414.97	10	935.00	935.00		935.00	
Naguabo.....	1,986,386	884,257	2,870,643	1.20	23,836.64	4,611.34	28,447.98	2,370.64	21,355.82	10	2,370.65	2,370.65		2,370.65	
Narajuto.....	9,528		9,528	1.20			9,528	935.69	4,890.29	10	935.69	935.69		935.69	
Pedras.....	1,408,083	497,988	1,906,071	1.20	16,897.02	5,975.92	22,872.93	1,906.08	17,154.66	10	1,906.07	1,906.07		1,906.07	
Petuelas.....	1,352,684	38,160	1,390,844	1.20	15,991.52	337.92	16,329.44	1,390.79	12,447.16	10	1,390.79	1,390.80		1,390.80	
Ponce.....	16,325,963	8,960,792	25,286,755	1.20	195,923.94	40,689.02	236,612.96	19,717.80	177,460.17	10	19,717.79	19,717.80		19,717.80	
Quebradillas.....	867,763		1,041,316	1.20	1,250.78	1,111.74	2,362.52	1,030.21	9,271.89	10	1,030.21	1,030.21		1,030.21	
Rio Grande.....	2,073,810	157,810	2,231,620	1.20	17,127.64	9,862.92	26,990.56	2,231.63	20,136.52	10	2,231.63	2,231.63		2,231.63	
Rio Piedras.....	5,776,726	1,068,801	6,845,527	1.20	45,320.70	20,197.30	65,518.00	6,456.53	49,138.50	10	6,456.53	6,456.54		6,456.54	

Salina Grande.....	942,012	13,350	955,362	1.20	11,304.16	160.30	11,464.36	955.36	8,598.37	.10	955.36	955.37
Salinas.....	3,430,282	1,666,757	5,096,039	1.20	41,271.16	22,426.10	63,696.26	5,308.02	47,772.30	.10	5,308.02	5,308.03
San German.....	2,951,384	1,220,865	3,181,279	1.20	35,416.62	2,758.74	38,175.36	3,181.28	28,631.52	.10	3,181.28	3,181.28
San Juan.....	26,156,940	12,554,378	38,710,423	1.20	398,945.87	191,455.59	590,401.46	38,713.95	348,425.52	.10	38,713.95	38,713.95
San Lorenzo.....	1,160,730	143,991	1,304,721	1.20	13,998.76	1,777.92	15,656.68	1,304.72	11,742.51	.10	1,304.72	1,304.72
San Sebastian.....	1,408,485	197,891	1,606,376	1.20	22,843.02	2,374.72	25,217.74	2,101.48	18,913.30	.10	2,101.48	2,101.48
Santa Isabel.....	3,069,810	794,330	3,864,140	1.20	36,837.72	9,531.96	46,369.68	3,864.14	34,777.26	.10	3,864.14	3,864.14
Toa Alta.....	758,806	272,812	1,031,618	1.20	9,105.68	3,273.80	12,379.48	1,031.63	9,294.61	.10	1,031.63	1,031.63
Treilillo Alto.....	1,402,160	1,018,621	2,420,781	1.20	17,545.92	12,223.54	29,769.46	2,420.78	22,377.10	.10	2,420.78	2,420.78
Utusado.....	838,335	420,844	1,259,179	1.20	10,000.02	5,050.14	15,050.16	1,254.18	11,297.63	.10	1,254.18	1,254.18
Vega Alta.....	3,211,245	94,240	3,305,485	1.20	38,534.94	1,130.88	39,665.82	3,305.48	29,749.37	.10	3,305.48	3,305.48
Vega Baja.....	730,695	1,169,268	1,899,963	1.20	8,768.34	14,031.48	22,799.82	1,899.99	17,099.86	.10	1,899.98	1,899.99
Vieques.....	3,201,595	311,666	3,513,261	1.20	27,727.02	3,740.02	31,467.04	2,622.25	23,600.28	.10	2,622.25	2,622.25
Villalba.....	523,750	695,981	1,219,731	1.20	38,420.28	8,351.76	46,772.06	3,897.67	35,079.05	.10	3,897.67	3,897.67
Yabucoa.....	1,895,450	1,515,977	3,411,427	1.20	22,745.40	18,191.74	40,936.00	3,411.43	30,702.55	.10	3,411.43	3,411.43
Yauco.....	3,214,060	1,031,115	4,245,175	1.20	38,575.92	757.38	39,333.30	3,277.78	29,499.98	.10	3,277.77	3,277.77
Total.....	187,297,992	56,766,606	244,064,598	.....	2,340,082.41	720,522.38	3,060,605.74	246,081.80	2,194,661.48	.....	238,483.27	243,861.29
												137,587.76

1 For Manababo the total rate is 1.35 per cent on rural property and 1.40 per cent on urban property, being the rate of municipal bond redemption tax, 0.16 per cent on the rural and 0.20 per cent on the urban. The rate of municipal bond redemption tax for Guayama is 0.12 per cent.

2 The municipality of San Juan has levied two municipal bond redemption taxes, one at the rate of 25 per cent and the other, in connection with the works at Camp Las Casas, at the rate of 0.15 per cent, which has been in force from the commencement of the second half of the fiscal year.

EXHIBIT No. 19 B.—*Statement showing distribution of property tax collections for the years ending June 30, 1918, and June 30, 1917.*

	1918	1917	Increase.	Decrease.
<b>Tax collections:</b>				
Current year.....	\$3,081,126.11	\$2,741,623.19	\$239,502.92	.....
Prior years.....	4,940.70	24,302.96	.....	\$19,362.26
<b>Total collections.....</b>	<b>3,086,066.81</b>	<b>2,765,926.15</b>	<b>239,502.92</b>	<b>19,362.26</b>
Protested taxes collected in previous years distributed.....	19,102.30	7,788.61	11,313.49	.....
<b>Total taxes distributed.....</b>	<b>3,055,169.11</b>	<b>2,773,714.96</b>	<b>300,316.41</b>	<b>19,362.26</b>
<b>Distribution:</b>				
<b>Insular government—</b>				
General purposes, one-tenth of 1 per cent.....	228,654.15	184,452.29	44,201.86	.....
General purposes, 25/100 of 1 per cent.....	370.09	451,302.09	.....	450,932.00
Bond redemption.....	226,408.10	182,807.94	43,596.16	.....
Sanitation purposes.....	112,261.24	110,504.85	1,756.39	.....
Excess over legal maxima transferred to insular revenues—				
Municipalities.....	\$19,393.58	.....	319,393.58	.....
School boards.....	106,884.61	.....	106,884.61	.....
<b>Total.....</b>	<b>993,966.77</b>	<b>929,067.17</b>	<b>515,831.60</b>	<b>450,932.00</b>
<b>Municipalities.....</b>	<b>1,226,277.25</b>	<b>1,213,692.52</b>	<b>12,584.73</b>	<b>.....</b>
<b>School boards.....</b>	<b>624,093.57</b>	<b>590,399.91</b>	<b>33,723.66</b>	<b>.....</b>
<b>Protested taxes.....</b>	<b>210,831.52</b>	<b>40,585.36</b>	<b>170,246.16</b>	<b>.....</b>
<b>Total distribution.....</b>	<b>3,055,169.11</b>	<b>2,773,714.96</b>	<b>732,386.15</b>	<b>450,932.00</b>

EXHIBIT No. 20.—*Receipts and disbursements of the insular government for the fiscal year ending June 30, 1918.*

<b>Insular revenues:</b>				
Balance July 1, 1917.....				\$581,476.17
Receipts—Excess over legal municipal and school boards maxima (Law No. 70 of 1916) (see Exhibit No. 22).....			\$426,278.19	
United States internal revenues.....			1,039,685.40	
Customs.....			370,000.00	
Internal revenues—Excise taxes.....		\$2,137,745.78		
Property taxes, insular proportion—				
One-tenth of 1 per cent.....	228,654.15			
25/100 of 1 per cent.....	370.09			
Income taxes.....		229,024.24		
Inheritance taxes.....		566,831.93		
Proportion of municipal income for sanitation—		52,706.06		
Property taxes.....	112,707.65			
Miscellaneous collections.....	7,018.40			
		119,726.05		
			3,106,084.06	
<b>Miscellaneous:</b>				
Ordinary.....		399,081.63		
Municipal bonds redeemed.....		54,500.00		
School-board bonds redeemed.....		30,500.00		
			484,081.63	
Repayments (see Exhibit No. 23).....			1,111,289.38	
Transfers from trust funds.....			200.00	
				6,537,668.66
<b>Total insular revenues receipts, including balance of July 1, 1917.....</b>				<b>7,119,144.83</b>
<b>Disbursements:</b>				
Fiscal year appropriations.....			4,772,776.70	
No-fiscal year appropriations.....			1,164,670.29	
Indefinite—				
Advances to municipalities.....		\$59,826.79		
Advances to school boards.....		25,000.00		
Miscellaneous.....		230,434.47		
			315,261.26	
<b>Bonds redeemed—</b>				
Municipal.....		54,000.00		
School boards.....		30,500.00		
			84,500.00	
Bond of the municipality of Peñuelas sold to the University of Porto Rico...			500.00	
Transfers to trust funds.....			72,896.27	
				6,410,604.52
<b>Balance June 30, 1918.....</b>				<b>708,540.31</b>

EXHIBIT No. 20.—Receipts and disbursements of the insular government for the fiscal year ending June 30, 1918—Continued.

<b>Trust funds:</b>		
Balance July 1, 1917.....		\$3,524,366.38
Receipts (see Exhibit No. 23).....	\$5,676,812.62	
Transfers from insular revenues.....	72,866.27	
		<u>5,749,708.89</u>
Total trust funds, including balance of July 1, 1917.....		9,274,075.27
Expenditures (see Exhibit No. 22).....	5,530,870.15	
Transfers to insular revenues.....	300.00	
		<u>5,531,170.15</u>
Balance June 30, 1918.....		<u>3,752,905.12</u>
Total balance, insular revenues and trust funds.....		<u>4,461,448.43</u>
<b>Insular revenues:</b>		
Cash.....	625,540.31	
Bonds unpledged.....	83,000.00	
		<u>708,540.31</u>
<b>Trust funds:</b>		
Cash.....	2,001,408.12	
Bonds pledged.....	1,661,500.00	
		<u>3,752,908.12</u>
		<u>4,461,448.43</u>

EXHIBIT No. 20-A.—Comparative statement of excise stamp sales detailed by sources, fiscal years 1915-16, 1916-17, 1917-18.

SCHEDULE A—EXCISE PROPER.

	1915-16	1916-17	1917-18
<b>Distilled spirits:</b>			
Domestic.....	\$391,473.50	\$352,901.46	\$209,423.21
Imported.....	21,924.49	23,782.43	15,280.46
Alcohol in medicine, cosmetics, etc.....	4,300.70	6,638.31	7,979.56
Total.....	<u>917,698.69</u>	<u>983,322.20</u>	<u>232,683.23</u>
<b>Beer:</b>			
Domestic.....	43,311.60	61,006.36	50,775.53
Imported.....	89,733.60	82,345.64	34,569.64
Total.....	<u>133,045.38</u>	<u>143,352.00</u>	<u>85,345.17</u>
<b>Wine:</b>			
Domestic.....			
Imported.....	54,372.37	60,711.04	18,201.06
Sparkling wine.....	1,739.20	1,016.80	1,071.20
Total.....	<u>56,111.57</u>	<u>61,727.84</u>	<u>19,272.28</u>
Champagne.....	3,567.90	4,507.00	4,225.47
Cigars.....	324,523.59	346,523.73	321,325.97
Cigarettes.....	616,051.73	698,096.56	725,100.38
Total.....	<u>940,584.32</u>	<u>1,044,610.29</u>	<u>1,046,426.35</u>
<b>Picadura and fine-cut chewing tobacco:</b>			
Excise stamps.....	190.25		
Special stamps.....	5,256.51	5,634.45	4,873.74
Total.....	<u>5,456.86</u>	<u>5,634.45</u>	<u>4,873.74</u>
<b>Perfumery:</b>			
Domestic.....	4,127.94	6,412.53	6,448.68
Imported.....	9,176.76	10,125.20	10,689.87
Total.....	<u>13,303.70</u>	<u>16,537.73</u>	<u>17,138.55</u>
<b>Patent Medicines:</b>			
Domestic.....	1,268.23	1,967.31	3,110.00
Imported.....	41,341.13	61,769.95	62,822.86
Total.....	<u>42,609.36</u>	<u>63,737.26</u>	<u>65,932.86</u>

EXHIBIT No. 20-A.—*Comparative statement of excise stamp sales detailed by sources, fiscal years 1915-16, 1916-17, 1917-18—Continued.*

SCHEDULE A—EXCISE PROPER—Continued.

	1915-16	1916-17	1917-18
Cosmetics, lotions, toilet matter, etc.:			
Domestic.....	\$2, 571. 15	\$4, 434. 30	\$5, 909. 47
Imported.....	3, 049. 07	5, 074. 35	5, 985. 99
Total.....	5, 620. 22	9, 508. 65	11, 895. 46
Cards.....	6, 926. 75	12, 474. 00	12, 661. 50
Arms and ammunition.....	8, 536. 39	8, 405. 02	9, 568. 87
Total.....	15, 463. 06	20, 839. 02	22, 230. 37
Matches:			
Domestic.....			
Imported.....	51, 706. 02	28, 333. 58	56, 343. 39
Total.....	51, 706. 02	28, 333. 58	56, 343. 39
Total, excise proper.....	2, 185, 166. 07	2, 382, 210. 02	1, 566, 367. 47

SCHEDULE B—LICENSE TAXES.

Manufacturers:			
Distilleries.....	\$1, 200. 00	\$1, 200. 00	\$1, 325. 00
Rectifiers.....	12, 900. 00	11, 700. 00	5, 700. 00
Perfumery.....	1, 212. 50	1, 312. 50	1, 385. 00
Cigars.....	4, 346. 25	4, 468. 75	4, 098. 75
Cigarettes.....	2, 500. 00	3, 101. 00	3, 300. 00
Medicines.....	281. 25	315. 00	355. 00
Strippers.....	25. 00		3, 690. 00
Stills.....	30. 00	50. 00	20. 00
Beer.....	100. 00	100. 00	100. 00
Total.....	22, 595. 00	22, 247. 25	19, 873. 75
Wholesale dealers:			
Distilled spirits.....	13, 650. 00	15, 275. 00	9, 887. 50
Wine.....	5, 707. 50	4, 952. 50	2, 810. 00
Beer.....	5, 312. 50	5, 630. 00	3, 855. 00
Cigars.....	3, 987. 50	4, 025. 00	4, 103. 00
Cigarettes.....	7, 790. 00	7, 612. 00	7, 356. 00
Arms and ammunition.....	337. 50	275. 00	455. 00
Perfumery.....	2, 725. 00	2, 437. 50	2, 908. 00
Denatured alcohol.....	107. 50	100. 00	125. 00
Leaf tobacco.....			6, 172. 50
Chewing tobacco.....			4, 270. 00
Cigars and cigarettes in vehicles.....			25. 00
Total.....	39, 617. 50	40, 307. 00	41, 832. 00
Retail dealers:			
Distilled spirits, wines and beers.....	98, 697. 00	81, 603. 50	46, 987. 25
Cigars and cigarettes.....	59, 999. 75	65, 018. 25	60, 663. 25
Arms and ammunition.....	2, 137. 50	2, 550. 00	1, 962. 50
Perfumery.....	9, 810. 00	10, 125. 00	9, 958. 75
Peddlers perfumery.....	796. 25	757. 50	736. 75
Denatured alcohol.....	657. 50	632. 50	607. 50
Total.....	172, 098. 00	160, 686. 75	120, 906. 00
Opium licenses.....	697. 02	684. 77	653. 62
Billiards.....	5, 052. 50	4, 895. 00	4, 830. 00
Physicians.....			203. 00
Intoxicating drinks.....			506. 00
Nonintoxicating drinks.....			4, 019. 50
Total.....	5, 749. 52	5, 579. 77	10, 217. 12
Total, schedule B.....	240, 080. 02	228, 820. 77	192, 828. 87

EXHIBIT No. 20-A.—*Comparative statement of excise stamp sales detailed by sources, fiscal years 1915-16, 1916-17, 1917-18—Continued.*

## SCHEDULE C—DOCUMENTARY.

	1915-16.	1916-17.	1917-18.
Notarial instruments.....	\$158,906.30	\$187,461.26	\$221,935.12
Tax certificates.....	1,021.30	943.00	1,369.00
Registrars of property.....	88,573.90	87,858.60	94,367.04
Blank books.....	355.74	268.07	1,541.51
Law pamphlets.....	60.10	44.20	171.04
Administrative fines.....	3,242.53	2,922.15	2,215.85
Stamp sales unclassified.....	215.56	453.88	
Total, schedule C.....	252,384.43	279,956.16	321,599.56
Industrial and commercial license taxes.....	2.50		

## SCHEDULE D—LUXURIES.

Motor vehicles and accessories, etc.....			\$28,354.58
Phonographs.....			375.88
Pianos and pianolas.....			699.92
Films.....			1,049.49
Diamonds, precious stones.....			.47
Total.....			30,480.34
Guarantee for cigars.....			28,267.25
Stamps for leaf tobacco.....			5,332.15
Total.....			33,599.40
Total, schedule D.....			64,079.74
Grand total.....	\$2,677,613.02	\$2,800,986.95	<sup>1</sup> 2,144,875.64

## Taxes paid under protest:

Excise.....	\$654.00
Guarantee stamps.....	16,275.75
Over deposited by stamp agent at Hormigueros.....	.11
	16,929.86

EXHIBIT No. 21.—*Funds of the insular government June 30, 1918.*

Depositories:	
American Colonial Bank, San Juan, P. R.....	\$1,440,517.72
Banco Comercial de Puerto Rico, San Juan, P. R.....	178,000.00
Banco Territorial y Agrícola de Puerto Rico, San Juan, P. R.....	180,000.00
Credito y Ahorro Ponceño, Ponce, P. R.....	75,000.00
The Mechanics & Metals National Bank of the City of New York, New York, N. Y.....	774,092.01
The Fletcher-American National Bank of Indianapolis, Ind.....	61,561.09
The Royal Bank of Canada, San Juan, P. R.....	398,720.51
Banco de Ponce, Ponce, P. R.....	50,000.00
Total cash in depositories.....	3,137,861.33
Less outstanding vouchers and pay checks drawn against funds in American Colonial Bank.....	882,071.83
	2,255,789.51
Cash in transit to American Colonial Bank.....	\$311,158.92
Draft in transit drawn on The Royal Bank of Canada.....	150,000.00
	461,158.92
Total available cash.....	\$2,716,948.43
Municipal bonds:	
Collateral to part of loan of \$400,000 from The Mechanics & Metals National Bank.....	248,500.00
Collateral to part of \$1,255,000 refunding bonds sold.....	931,500.00
Unpledged.....	51,000.00
	1,201,000.00

<sup>1</sup> In Exhibit No. 20 is included \$9,800 which represents fine imposed by the district court of Mayaguez, case No. 4771, thus decreasing the total excise taxes collected during the year to \$2,127,945.78. The difference of \$16,929.86 between the total of \$2,144,875.64 shown in this exhibit is caused as follows:



EXHIBIT No. 21.—*Funds of the insular government June 30, 1918—Continued.*

## School board bonds:

Collateral to part of loan of \$400,000 from The Mechanics & Metals National Bank.....	\$152,500.00	
Collateral to part of \$1,255,000 refunding bonds sold.....	359,000.00	
Unpledged.....	32,000.00	
		\$543,500.00
Total balance (see Exhibit No. 20).....		4,461,448.43
Due from municipalities on loans from insular revenues (see Exhibit No. 6).....	137,299.53	
Due from school boards on loans from insular revenues (see Exhibit No. 7).....	26,533.32	
Due from school boards on loans from school building fund (see Exhibit No. 8).....	25,255.15	
		189,088.00
RIILs collectible:		
Insular revenues.....		17,678.89
Grand total.....		4,668,215.32

EXHIBIT No. 22.—*Statement of cash receipts during the year ending June 30, 1918.*

	Insular revenues.	Trust funds.	Total.
<b>RECEIPTS.</b>			
Cash balance as of July 1, 1917.....	\$581,476.17	\$3,524,369.38	\$4,105,845.55
Excess over legal municipal and school board maxima (Law No. 70 of 1916).....	426,278.19		426,278.19
United States internal revenues.....	1,039,685.40		1,039,685.40
Customs.....	370,000.00		370,000.00
Excise and property taxes for municipalities and school boards.....	2,137,745.78	2,388,910.25	4,526,656.03
Industrial and commercial license taxes.....			
Property taxes, insular proportion.....	229,024.24		229,024.24
Income tax.....	566,831.93		566,831.93
Inheritance tax.....	52,706.06		52,706.06
Proportion of municipal income for sanitation.....	119,726.05		119,726.05
Court fines and fees.....	41,939.79	45,968.52	87,908.31
Harbor and dock fees.....	24,376.77	31,614.43	55,991.20
Telegraph and telephone receipts.....	96,961.79		96,961.79
Interest.....	155,015.33	12,793.32	167,808.65
Royalties on franchises.....	7,899.03		7,899.03
Taxes on insurance premiums.....	30,065.33		30,065.33
Rent of property.....	13,846.06		13,846.06
Sale of Government property.....	4,670.44		4,670.44
United States Government (Morrill-Hatch Act).....		50,000.00	50,000.00
Proceeds from sale of bonds.....		\$102,227.81	102,227.81
Municipal and school board bonds redeemed.....	85,000.00		84,500.00
Miscellaneous.....	24,317.09	3,055,296.29	3,080,115.38
Bureau of supplies, printing, and transportation, repayments.....	898,461.69		898,461.69
Repayments of loans by municipalities:			
Cash.....	11,677.31		11,677.31
Bonds.....			
Repayments of loans by school boards:			
Cash.....	2,533.32		2,533.32
Bonds.....			
Other repayments.....	198,617.06		198,617.06
Transfers.....	300.00	72,896.27	73,196.27
Insular government receipts.....	6,537,668.66	5,749,708.89	12,287,377.55
Total.....	7,119,144.83	9,274,078.27	16,393,223.10
<b>DISBURSEMENTS.</b>			
Appropriations:			
1915-16.....	2,330.78		2,330.78
1916-17.....	139,272.78		139,272.78
1917-18.....	4,631,173.14		4,631,173.14
No fiscal year.....	1,164,670.29		1,164,670.29
Indefinite.....			
Relief of municipalities (loans).....	59,826.79		59,826.79
Relief of school boards (loans).....	25,000.00		25,000.00
Miscellaneous.....	230,434.47		230,434.47
Municipal bonds redeemed.....	54,500.00		54,500.00
School board bonds redeemed.....	30,500.00		30,500.00
Transfers.....	72,896.27	300.00	73,196.27
Municipalities tax account.....		1,594,638.38	1,594,638.38
School boards, tax account.....		730,978.18	730,978.18
Insular bond redemption tax.....		86,009.62	86,009.62

<sup>1</sup> Includes interest on irrigation fund and university agricultural fund.

<sup>2</sup> Deposited in San Juan Harbor fund, \$1,967.81; in construction of harbor improvements at San Juan, \$100,270.

EXHIBIT No. 22.—Statement of cash receipts during the year ending June 30, 1918—Con.

	Insular revenues.	Trust funds.	Total.
DISBURSEMENTS—continued.			
Irrigation fund:			
Construction.....		\$18,934.99	\$18,934.99
Maintenance and operation.....		510,004.66	510,004.66
Development and extension of water power.....		15,230.56	15,230.56
Workman's relief trust fund.....		55,513.84	55,513.84
Mayaguez-Maricao Road.....		23,265.15	23,265.15
Maricao-Indiera Road.....		2,413.57	2,413.57
Utuado-Lares Road.....		9.60	9.60
Yauco-Lares Road.....		34,301.57	34,301.57
Lares-Adjuntas Road.....		43,191.78	43,191.78
Arecibo-Lares Road.....		64,244.79	64,244.79
Vieques Road.....		8,420.44	8,420.44
Ciales-Juana Diaz Road.....		38,620.95	38,620.95
Yabucoa-Humacao Bridge.....		15,834.62	15,834.62
Barros-Corozal Road.....		62,230.53	62,230.53
Fajardo-Ceiba Bridge.....		16,469.00	16,469.00
University fund.....		55,287.07	55,287.07
Permanent university fund.....		520.00	520.00
University agricultural fund.....		52,948.44	52,948.44
Food commission fund.....		1,820,000.00	1,820,000.00
Taxes paid under protest.....		20,311.40	20,311.40
Cash bond deposits.....		2,425.71	2,425.71
Construction of harbor improvements at San Juan.....		21,452.19	21,452.19
San Juan Harbor fund.....		24,000.00	24,000.00
Wharf and harbor fund.....		3,831.74	3,831.74
Municipal bond funds.....		68,063.64	68,063.64
School board bond funds.....		25,098.13	25,098.13
Redemption of municipal bonds.....		50,711.68	50,711.68
Redemption of school board bonds.....		30,500.00	30,500.00
Unclaimed wages.....		2,389.19	2,389.19
Miscellaneous.....		22,958.73	22,958.73
Insular government disbursements.....	\$6,410,604.52	5,521,170.15	11,931,774.67
Balance as of June 30, 1918.....	708,540.31	3,752,908.12	4,461,448.43
Grand total.....	7,119,144.83	9,274,078.27	16,393,223.10

EXHIBIT No. 23.—Repayment receipts, detailed, fiscal year ending June 30, 1918.

Repayments to bureau of supplies, printing, and transportation:			
By various departments from insular revenues appropriations.....		\$799,856.41	
By various departments from trust funds; by municipalities, school boards, and other sources.....		81,282.30	
By special disbursing officers.....		17,322.98	
			\$898,461.69
Payments by municipalities on account of loans.....			11,677.31
Repayments by school boards on account of loans.....			2,533.32
Payments by pay patients, insane asylum.....			13,406.50
Amounts repaid by department of the interior for payments received from municipalities and school boards for services rendered.....		18,097.49	
Miscellaneous sources for material sold and miscellaneous services rendered.....			
Miscellaneous sources for work done by bureau of insular telegraph.....		53.97	
			18,751.46
Amounts repaid by department of health for payments received from sale of equipment and miscellaneous material.....			3,419.03
Amounts repaid by department of insular police for payments received from sale of uniforms and other equipment.....			12,655.76
Amounts repaid by department of education for payments received from sale of equipment.....			10,332.22
Amounts repaid by special disbursing officers.....			2,379.87
Repayments to correct erroneous disbursements and other miscellaneous sources.....			.80
Amounts repaid by departments to various appropriations.....			137,660.42
Total.....			1,111,260.83

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918.

(Not to be confused with expense accounts of Exhibit No. 5.)

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Expenses.	Total debits.	Balance unexpended June 30, 1918.
<b>LEGISLATIVE.</b>										
<b>Executive council:</b>										
Salaries.....	\$1,083.10	\$2,851.29		\$3,934.39		\$2,113.36	\$765.71	\$235.00	\$2,404.07	\$330.32
Temporary employees.....	781.53			781.53				43.15	43.15	738.38
Legislative printing.....	677.77			677.77				677.77	677.77	
Incidentals.....	528.24	200.00		728.24		260.38		145.76	406.14	382.93
Postage and freight.....	297.50		\$60.83	297.50				123.50	123.50	174.00
Traveling expenses.....	352.87			352.87				344.10	344.10	8.77
Telephone and telegraph service.....	4.14			4.14		.44		2.37	2.81	1.33
Stationery.....	921.28			921.28				545.07	545.07	376.21
Inspection and testing of gas and electric meters.....	4,000.00			4,000.00						4,000.00
<b>Salaries:</b>										
Incidentals.....	511.00			511.00		473.06			473.06	37.94
Regulation of public utilities.....	20.45			20.45		20.35		2.94	13.29	7.16
				75.00		25.25			25.25	46.75
<b>Total, executive council.....</b>	<b>8,666.88</b>	<b>3,637.29</b>	<b>60.83</b>	<b>12,365.00</b>		<b>2,885.84</b>	<b>765.71</b>	<b>2,409.66</b>	<b>6,061.21</b>	<b>6,303.79</b>
<b>House of delegates:</b>										
Salaries.....	410.00	1,651.98		2,061.98		1,651.98			1,651.98	410.00
Temporary employees.....	174.26			174.26		168.00			168.00	6.26
Legislative printing.....	141.01			141.01				22.47	22.47	118.54
Incidentals.....	351.01	125.00		476.01		14.62		62.97	107.59	368.42
Library supplies.....	292.75			292.75				88.99	175.77	116.96
Mileage for members.....	110.96			110.96				83.69	83.69	27.27
Telephone service.....	56.85			56.85				56.85	56.85	
<b>Total, house of delegates.....</b>	<b>1,414.81</b>	<b>1,776.98</b>	<b>88.99</b>	<b>3,280.78</b>		<b>1,834.60</b>	<b>88.99</b>	<b>294.52</b>	<b>2,218.11</b>	<b>1,062.67</b>
<b>Senate of Porto Rico:</b>										
Salaries.....	28,470.00		70.00	28,540.00		27,493.78			27,493.78	1,046.22
Furniture.....	2,500.00			2,500.00		2,555.24			2,555.24	
Legislative printing.....	4,500.00			4,500.00		2,553.83			2,553.83	1,946.17
Incidentals.....	6,000.00		765.71	6,765.71		3,699.83	40.00		3,739.83	3,025.88

[illegible]

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
Bureau of weights and measures:										
Salaries.....		\$11,800.00		\$11,800.00		\$11,692.05	\$88.00		\$1,780.05	\$119.95
Stationery and printing.....	\$105.84	350.00	88.25	464.09		156.23	46.45	\$0.92	205.60	287.49
Traveling expenses.....		4,000.00	350.00	4,350.00		4,262.71			4,262.71	87.29
Telephone.....	.26	100.00		100.26		27.45			72.81	27.45
Equipment of weights and measures.....	205.82	500.00	44.21	751.03		427.63	250.00		677.63	73.40
Postage and freight.....		800.00	268.00	1,068.00		1,065.81			1,065.81	22.19
Incidentals.....	7.26	600.00	2.24	609.50		270.81	300.00		1,570.81	38.69
Total.....	1,727.00	51,490.00	1,499.72	54,716.72		51,703.95	1,211.45	1,054.27	53,969.67	747.05
Bureau of supplies, printing and transportation:										
Salaries.....	14.24	27,120.00		27,134.24		26,128.20	978.57		27,101.77	32.47
Contingent expenses.....	1,116.83	5,000.00	2,180.07	8,296.90		7,865.40			7,865.40	430.20
Working capital fund.....	19,153.08		945,460.19	962,613.27		938,491.71	20,000.00		958,491.71	4,121.56
Total.....	20,282.85	32,120.00	945,640.26	968,043.11		975,480.31	20,978.57		996,458.88	4,584.23
Total, executive secretary.....	22,009.85	89,610.00	947,139.98	1,052,759.83		1,024,184.26	22,190.02	1,054.27	1,047,428.55	5,331.28
<i>Attorney General.</i>										
Office proper:										
Salaries.....	20.84	51,870.00	83.24	51,974.18		49,051.20	2,000.00		51,051.20	922.98
Incidentals.....	579.18	3,000.00	2,600.00	6,079.18		4,046.60			4,076.60	2,002.58
Litigation fund.....	686.70	1,000.00	2,152.00	3,777.70		2,854.35		29.80	2,884.15	923.55
Postage.....		400.00		400.00		395.00		600.00	395.00	4.00
Traveling expenses.....	246.33	1,000.00		1,246.33		953.95			953.95	292.38
Total.....	1,432.05	57,270.00	4,775.24	63,477.29		56,712.30	2,000.00	629.80	59,342.10	4,135.29
Penal institutions:										
Reform school—										
Salaries.....	112.50	14,720.00		14,832.50		13,670.36	1,000.00		14,670.36	162.01
Substance.....	1,320.13	12,942.00	57.52	14,319.65		10,097.44	1,660.00	22.75	11,740.22	2,579.73

Equipment.....	211.59	2,000.00	2,700.00	4,911.59	2,253.48	2,325.39	2,552.20
Lighting power and water.....	59.07	500.00	1,400.00	1,959.07	1,612.40	1,621.32	337.75
Telephone and telephone of animals.....	18.48	75.00	.....	91.48	74.08	83.95	7.53
Transportation and care of animals.....	136.36	300.00	280.00	716.36	537.37	694.97	111.39
Postage and freight.....	12.71	50.00	.....	62.71	42.77	51.77	10.94
Incidentals.....	1,048.34	2,803.00	2,403.63	6,254.97	5,016.90	5,635.45	1,219.52
Purchase of an electric accumulator.....	1,000.00	.....	.....	1,000.00	.....	1,000.00	.....
<b>Total.....</b>	<b>3,917.18</b>	<b>33,390.00</b>	<b>6,841.45</b>	<b>44,146.63</b>	<b>33,304.77</b>	<b>37,137.56</b>	<b>7,011.07</b>
<b>Penitentiary—</b>							
Salaries.....	264.87	23,620.00	.....	23,884.87	23,110.63	25,023.14	261.73
Food for prisoners.....	1,794.44	35,131.00	3,577.25	40,502.69	33,619.83	37,122.16	3,390.53
Clothing.....	573.34	6,000.00	3,242.79	9,816.13	8,978.17	8,978.17	387.96
Saving fund.....	94.57	2,500.00	188.60	2,783.17	2,368.95	2,368.95	387.35
Medicines.....	191.80	800.00	.....	991.80	797.65	803.17	188.63
Fuel.....	159.42	400.00	450.00	1,009.42	556.86	705.20	804.22
Incidentals.....	315.54	2,535.00	2,300.20	5,150.74	4,386.39	4,347.09	803.65
Water.....	138.04	1,100.00	.....	1,238.04	824.17	1,121.41	116.63
Lighting.....	91.52	1,200.00	450.00	1,741.52	1,399.82	1,772.92	268.60
Telephone and telephone.....	26.97	80.00	.....	106.97	73.48	87.78	19.19
Postage and freight.....	92.05	80.00	.....	142.05	44.24	91.39	50.66
Unexpended property.....	175.67	.....	.....	175.67	32.99	104.61	66.06
<b>Total.....</b>	<b>3,918.23</b>	<b>73,416.00</b>	<b>10,208.84</b>	<b>87,543.07</b>	<b>76,083.28</b>	<b>80,354.36</b>	<b>6,688.21</b>
<b>San Juan and Arecibo District Jails—</b>							
Salaries.....	136.03	.....	.....	136.03	.....	39.66	86.37
Food for prisoners.....	1,657.66	.....	60.37	1,718.03	846.90	857.13	860.90
Lighting and water.....	267.94	.....	.....	267.94	.....	289.58	28.26
Telephone and telephone service.....	143.61	.....	.....	143.61	3.10	104.17	37.44
Postage and freight.....	14.78	.....	.....	14.78	.....	1.32	13.46
Incidentals.....	40.70	.....	.....	40.70	7.09	40.70	.....
Medicines and supplies.....	380.45	.....	.....	380.45	13.00	.....	367.45
<b>Total.....</b>	<b>2,641.17</b>	<b>.....</b>	<b>60.37</b>	<b>2,701.54</b>	<b>873.09</b>	<b>1,297.56</b>	<b>1,403.98</b>
<b>San Juan Jail—</b>							
Salaries.....	.....	2,590.00	.....	2,590.00	2,499.83	2,599.83	17
Food for prisoners.....	13,226.00	15,301.90	2,076.90	30,594.80	14,011.13	14,618.02	685.77
Lighting and water.....	790.00	790.00	.....	790.00	538.02	538.02	121.98
Telephone and telephone.....	30.00	30.00	.....	30.00	6.98	6.98	23.02
Postage and freight.....	10.00	10.00	.....	10.00	4.23	4.23	5.78
Incidentals.....	800.00	800.00	1,026.00	1,826.00	1,430.70	1,430.70	394.30
<b>Total.....</b>	<b>17,406.00</b>	<b>3,100.90</b>	<b>3,102.90</b>	<b>20,509.80</b>	<b>18,490.88</b>	<b>19,275.88</b>	<b>1,231.02</b>

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations effecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<b>Attorney general—Continued.</b>										
<b>Penal Institutions—Continued.</b>										
<b>Arrecho Jail—</b>										
Salaries.....	\$4,500.00			\$4,500.00		\$4,406.67	\$90.00		\$4,406.67	\$93.33
Food for prisoners.....	10,415.00			10,415.00		6,633.95	2,730.00		9,383.95	1,081.05
Lighting and water.....	730.00			730.00		687.46			687.46	92.54
Telegraph and telephone.....	75.00			75.00		59.31			59.31	15.69
Postage and freight.....	30.00			30.00		22.83			22.83	7.17
Incidentals.....	694.00			694.00		1,007.98	200.00		1,007.98	286.02
Transportation.....	200.00			200.00					200.00	
<b>Total.....</b>	<b>18,694.00</b>		<b>550.00</b>	<b>19,244.00</b>		<b>14,818.23</b>	<b>2,990.00</b>		<b>17,808.23</b>	<b>1,435.77</b>
<b>Ponce Jail—</b>										
Salaries.....	\$70.52	7,020.00	33.88	7,124.35		6,999.23	84.00	\$5.66	7,058.89	65.46
Food for prisoners.....	607.51	13,423.00	29.14	14,059.65		6,971.63	6,000.00	68.37	13,040.00	1,019.65
Lighting and water.....	102.21	650.00		752.21		532.58		6.63	539.21	213.00
Telegraph and telephone.....	92.20	25.00		117.20		3.68		73.78	77.46	39.74
Postage and freight.....	39.51	50.00		99.51		21.07		11.89	32.96	66.55
Incidentals.....	2,666.04	500.00	50.00	3,116.04		2,873.19		43.42	2,916.61	199.43
<b>Total.....</b>	<b>3,477.99</b>	<b>21,668.00</b>	<b>112.97</b>	<b>25,253.96</b>		<b>17,371.38</b>	<b>6,084.00</b>	<b>209.75</b>	<b>23,665.13</b>	<b>1,568.88</b>
<b>Mayaguez Jail—</b>										
Salaries.....	19.26	6,420.00		6,439.26		6,364.00			6,377.60	61.66
Food for prisoners.....	917.64	8,344.00	165.00	9,426.64		4,373.84	2,916.00	13.60	7,311.72	2,114.92
Lighting and water.....	134.00	600.00		734.00		500.35		21.88	589.73	194.28
Telegraph and telephone.....	112.86	25.00		137.86		8.42		39.37	60.12	77.44
Postage and freight.....	10.20	37.00		47.20		22.79		51.70	37.57	19.63
Incidentals.....	278.42	700.00		978.42		618.04	100.00	4.78	618.04	360.38
Medicines and supplies.....	71.60			71.60		9.37		62.23	71.60	
<b>Total.....</b>	<b>1,543.98</b>	<b>16,126.00</b>	<b>165.00</b>	<b>17,834.98</b>		<b>11,796.81</b>	<b>3,016.00</b>	<b>193.56</b>	<b>15,006.37</b>	<b>2,828.61</b>





EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<i>Attorney general—Continued.</i>										
<i>Treasurer—Continued.</i>										
Traveling expenses, internal revenue agents.	\$8.85	\$8,316.00		\$8,324.85		\$6,995.44	\$1,300.00		\$8,295.44	\$29.41
Care of horses, internal revenue agents.		7,200.00		7,200.00		6,310.75	1,300.00		6,610.75	699.25
Automobile repairs.		260.00		260.00		147.11			147.11	102.89
Engraving plates and printing internal-revenue stamps.		10,000.00		10,000.00		8,810.04	1,000.00		9,810.04	199.96
Cigar guarantee stamps.		5,000.00		5,000.00		19.61	1,000.00		1,019.61	3,980.39
Traveling expenses, assessors.		4,200.00		4,200.00		2,844.31	1,000.00		3,844.31	305.69
Care of horses, assessors.		2,500.00		2,500.00		1,908.69	375.00		2,283.69	218.60
Salaries, collectors of internal revenue.		69,980.00		69,980.00		68,060.13	900.00		68,960.13	1,029.87
Revision of the assessment of property in Porto Rico.	6,677.76			6,677.76		6,677.76			6,677.76	
Settlement of claims for overcollection of rentals.	84.58			84.58		45.17			45.17	39.41
Compensation to stamp agents.		714.34		714.34		714.34			714.34	
Levying additional taxes on income of the fiscal year 1917-18.		8,000.00		8,000.00						8,000.00
<b>Total, treasurer.</b>	11,159.91	257,640.34	\$7,995.00	276,795.25		250,738.53	7,875.00	\$521.96	259,135.49	17,689.76
<b>Auditor:</b>										
Salaries.	3,318.78	76,720.00	94.00	80,132.78		67,096.84	4,327.49	15.06	71,439.39	8,693.39
Stationery and printing.	105.10	1,000.00	1,600.00	2,705.10		1,888.52			1,888.52	815.58
Telephone and telegraph.	16.31	5,000.00		5,016.31		56.23	9.30		65.53	50.78
Traveling expenses.	1,005.77	5,000.00	23.24	6,029.01		4,123.35			4,123.35	1,905.66
Postage and freight.		350.00	55.00	405.00		401.24			401.24	3.76
Incidentals.	29.79	1,000.00	2,668.88	3,698.67		2,988.45	10.33		2,998.78	699.89
<b>Total, auditor.</b>	4,475.75	84,170.00	4,441.12	93,086.87		76,554.63	4,347.12	15.06	80,916.81	12,170.06

*Department of the Interior.*

<i>Commissioner of the Interior:</i>									
Salaries.....	643.51	98,820.00	37.22	99,500.73		86,337.64	12,769.58	326.42	99,433.64
Compensation to pilots acting as cap- tains of the ports.....	267.98	1,500.00		1,767.98		1,254.42			1,357.90
Incidentals.....	729.78	2,000.00		14,194.17		13,607.31		103.47	13,607.31
Traveling expenses.....	281.12	3,500.00	11,464.38	4,667.60		2,749.83	1,500.00		4,249.83
Postage and freight.....	77.12	2,000.00	886.48	2,427.12		2,362.64			2,362.64
Unexpended property.....	53.31	2,000.00	350.00	2,553.31		2,106.23	336.48		2,441.71
Blank books and printing.....	114.12	3,500.00	800.00	4,414.12		2,106.83	2,000.00		4,056.83
Automobile expenses.....	263.17	3,500.00	538.35	2,601.52		2,185.53	156.09		357.20
Telephone and telegraph.....	52.33	1,500.00	538.35	2,601.52		186.37			2,341.62
Expenses, division of public lands.....	468.01	4,000.00	73.36	4,641.72		2,043.72	2,074.95	366.50	396.05
Miscellaneous expenses.....			74.95	4,641.72		74.95		.33	4,485.17
<b>Total.....</b>	<b>2,950.78</b>	<b>119,320.00</b>	<b>15,024.75</b>	<b>137,295.53</b>		<b>114,964.27</b>	<b>18,837.10</b>	<b>796.72</b>	<b>134,596.09</b>
<b>Maintenance and repair of public build- ings and improvements:</b>									
Maintenance, repair and reconstruc- tion of public buildings.....		50,000.00	3,561.51	53,561.51		50,133.82	1,000.00		51,133.82
Water for public buildings.....	2,656.28	1,000.00		2,656.28		1,090.91		1,575.37	2,656.28
Electric light for public buildings.....	1,411.51	2,000.00	1,000.00	3,217.62		920.31		863.19	1,783.50
Repairs to institute of tropical medi- cine building.....	217.62	2,000.00		2,031.22		2,921.42			2,921.42
Construction of two dormitories, boys and girls' charity schools, Audencia building.....		20,000.00	31.22	20,000.00		946.97			946.97
Allen Street No. 2.....	103.15			103.15		599.00			599.00
Allen Street No. 3.....	53.47			53.47		103.15			103.15
Allen Street No. 5.....	117.08			117.08		47.04			47.04
Boys' Charity School.....	123.00		11.22	123.00		80.00			80.00
Dependence Building.....	341.63			341.63		123.00			123.00
Girls' Charity School.....	1,378.89		11.22	1,390.11		1,363.66			1,363.66
Leper colony, Pearl Island.....	111.21		11.22	122.43		.75			.75
Intendencia Building.....	172.65			172.65		150.43			150.43
Nevada station.....	164.83			164.83		14.35			14.35
Penitentiary.....	249.77			249.77		204.58			204.58
Office, secretary of Porto Rico.....	78.16			78.16		49.00			49.00
San Francisco No. 60 police barracks.....	6,648.48		11.22	6,648.48		6,628.00			6,628.00
Humacao public building.....	97.50			97.50		56.64			56.64
Police barracks, Sehoruco.....	50			50		50			50
Captain of the port building, Ponce.....	7.33			7.33		7.33			7.33
Ponce blind asylum.....	268.54			268.54		200.04			200.04
Ponce district court and jail.....	18.19			18.19		1.64			1.64
Culebra public building and cistern.....	44.63			44.63		43.00			43.00
Arecibo district court.....	30.08			30.08		30.08			30.08
Arecibo district jail.....	50			50		50			50
Public works storehouse, Marina.....	33			33		33			33

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
EXECUTIVE—Continued.										
Department of the Interior—Continued.										
Maintenance and repair of public buildings and improvements—Continued.										
Insular fair grounds—Continued.										
Captain of the port building, Mayaguez.	\$0.86			\$0.86						\$0.86
University of Porto Rico, Mayaguez.	.72			.72						.72
Caguas public building.	202.61			202.61		\$120.89			\$120.89	81.72
Miscellaneous repairs.	.22			.22						.22
Funds for the repair of school building at Corozal.	1,965.59			1,965.59		1,148.90			1,148.90	816.69
Alteration, repair, and construction of reform school buildings.	225.72			225.72		65.26			65.26	160.46
Repairs reform school buildings.	30,000.00		\$46.60	30,046.60		22,751.89			22,751.89	7,294.71
Reconstruction of Fajardo Custom-house.	979.68			979.68		979.68			979.68	
Improvements to the boys' charity school.	8,000.00			8,000.00		514.56		\$7,485.44	8,000.00	
Improving the sewerage system of the district jail at Guayama.	859.35			859.35				859.35	859.35	
Construction of model penitentiary.	781.52			781.52		411.93			411.93	369.59
Erection of an insular capital building.	117,508.89			117,508.89						117,508.89
Construction of a district jail at Aguadilla.	287,161.46			287,161.46						287,161.46
Construction of an insular building in the city of Guayama.	20,000.00			20,000.00						20,000.00
Construction of a pier in the city of Aguadilla.	50,000.00			50,000.00						50,000.00
Construction of addition to building at experimental station, Rio Piedras.	12,000.00			12,000.00						12,000.00
College of Agriculture and Mechanic Arts, Mayaguez.	14,000.00			14,000.00						14,000.00
Erection of buildings and improvements.	48.97			48.97		3.95		45.02	48.97	

Building, construction, and repairs, College of Agriculture and Mechanical Arts.....	1,797.61				1,797.61				1,797.61			
Purchase and construction of rural school buildings.....	536.72				536.72			536.72	536.72			97,900.00
Rural school building fund.....				100,000.00				\$2,100.00				1,000.00
Construction of rural school building in Coban.....				1,000.00								1,000.00
Construction of rural school building in Luquillo.....				1,100.00								634,209.82
<b>Total.....</b>	<b>560,307.14</b>	<b>\$75,000.00</b>	<b>106,794.21</b>	<b>742,091.35</b>	<b>93,416.44</b>	<b>3,100.00</b>	<b>11,365.09</b>	<b>107,881.53</b>	<b>634,209.82</b>			
<b>Construction, maintenance, and repair of public roads and bridges:</b>												
Salaries.....	1,681.21			1,681.21								
Care of mules.....	453.90			453.90								
Purchase and repair of machinery.....	5,875.36			5,875.36								
Travelling expenses.....	947.26			947.26								
Roads (bridges and handrails).....	8.00		3.75	8.00								
Repairs (bridges and culverts).....	41.00			41.00								
Stones, labor, fuel, etc.....	25,987.76		5,217.63	31,205.39								
Incidentals.....	541.04			541.04								
<b>Total.....</b>	<b>33,496.43</b>			<b>33,496.43</b>								
<b>Construction, maintenance, and repair of public roads and bridges:</b>												
Construction of San Antonio-Martin Peña Road.....	8.20	625,000.00	55,502.78	680,510.98								
Construction of San Sebastian-Las Marias Road.....	58,241.76		147.75	58,389.51								
Construction of Arellibo-Lares Road.....	18,224.97			18,224.97								
Construction of Corozal-Moreno Road.....	12,121.92		614.84	12,736.76								
Construction of 1 kilometer, Ponce-Adjuntas Road.....	19,401.12		18.12	19,419.24								
Construction of Chiles-Juana-Diaz Road.....	19.80			19.80								
Construction of Camuy-San Sebastian Road.....	5.32			5.32								
Construction of road from Road No. 2 to Florida adentro.....	27,639.52			27,639.52								
Construction of Martin Peña-Bayamon Road.....	3.04			3.04								
Construction of bridges over Rivers Vegas and Duey in jurisdiction of Yauco.....	5,507.61		700.00	6,207.61								
Construction of road No. 16 from Yauco to road No. 14.....	648.91			648.91								
Construction of bridges over Inabon, Cerillos, and Portugues Rivers.....	7,070.54			7,070.54								
Construction of bridge, Aguadilla-San Sebastian road (Ponton Garcia).....	9,186.79		62.22	9,249.01								
<b>Total.....</b>	<b>2,991.86</b>			<b>2,991.86</b>								

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—Continued.</b>										
<i>Department of the Interior—Continued.</i>										
Maintenance and repair of public buildings and improvements—Continued.										
Insular fair grounds.	\$0.86			\$0.86						\$0.86
Captain of the port building, Mayaguez.	.72			.72						.72
University of Porto Rico, Mayaguez.	202.61			202.61		\$120.89			\$120.89	81.72
Caguas public building.	.22			.22						.22
Miscellaneous repairs.	1,965.59			1,965.59		1,148.90			1,148.90	816.69
Funds for the repair of school building at Corozal.	225.72			225.72						
Alteration, repair, and construction of reform school buildings.	30,000.00	\$46.60		30,046.60		22,751.89			22,751.89	160.46
Repairs reform school buildings.	979.68			979.68		979.68			979.68	
Reconstruction of Fajardo Custom-house.	8,000.00			8,000.00		514.56		\$7,485.44	8,000.00	
Improvements to the boys' charity school.	859.35			859.35				859.35	859.35	
Improving the sewerage system of the district jail at Guayama.	781.52			781.52		411.93			411.93	
Construction of model penitentiary.	117,508.89			117,508.89						399.59
Erection of an insular capital building.	287,161.46			287,161.46						117,508.89
Construction of a district jail at Aguadilla.	20,000.00			20,000.00						287,161.46
Construction of an insular building in the city of Guayama.	50,000.00			50,000.00						20,000.00
Erection of a pier in the city of Aguadilla.	12,000.00			12,000.00						50,000.00
Construction of addition to building at experimental station, Rito Piedras.	14,000.00			14,000.00						12,000.00
College of Agriculture and Mechanic Arts, Mayaguez.										14,000.00
Erection of buildings and improvements.	48.97			48.97		3.95		45.02	48.97	

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EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<i>Department of the Interior—Continued.</i>										
Construction, maintenance, and repair of public roads and bridges—Continued.										
Construction of road from kilometer 3, Bayamon-Comerio road to Toa Alta.....	\$24,978.90		\$1,432.54	\$26,411.44		\$17,547.67			\$17,547.67	\$8,863.77
Construction of 5 bridges, as designated, on Ponce-Guayama road.....	70,000.00			70,000.00		15,012.34			15,012.34	54,987.66
Completion of road No. 2 between San Juan and Arecibo.....	1.56			1.56				\$1.56	1.56	
Completion of Cabo Rojo-San German road.....	252.53			252.53			\$252.53		252.53	
Completion of Las Piedras-San Lorenzo and Naguabo-Juncos road.....	1,635.97		1,608.48	2,644.45		2,466.37			2,466.37	178.08
Termination of road in Vieques.....	10,267.30		4,334.79	14,602.09		14,237.44	360.15		14,597.59	4.50
Study of road from Hatillo to connect with Arecibo-Lares road.....	351.04			351.04						
Study of road from Barrios to Coamo.....	6,459.04			6,459.04						
Expenses of suspension bridge at Barrios.....	51.91			51.91		51.91			51.91	6,459.04
Construction of culvert, Vega Baja-Morovis road.....	.67			.67			.67		.67	
Construction of culverts, Caguas-San Lorenzo road.....	1,474.49			1,474.49		856.39	618.10		1,474.49	
Construction of guard wall at "La Guardia Civil".....	15.00			15.00			15.00		15.00	
Total.....	312,065.36	\$625,000.00	69,042.90	1,006,138.26		736,911.45	51,949.69	419.92	789,251.06	216,857.20
<b>Maintenance and repair of harbor improvements:</b>										
Repairs, maintenance, and construction of certain docks, bulkheads, and waterways.....	342.70			342.70						342.70
Rebuilding bulkhead and sea wall in San Juan Harbor.....	6,196.78		5,025.60	11,222.38		3,004.75	5,000.00	2,028.16	10,032.91	1,189.47





EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<i>Department of Education.</i>										
<i>Office of the commissioner:</i>										
Salaries.....	\$1,355.58	\$46,880.00	\$11.00	\$48,246.58		\$40,483.12	\$2,148.33	\$524.72	\$43,366.17	\$4,080.41
Incidentals and traveling expenses.....	1,244.79	10,000.00		11,244.79		9,438.07	66.35	136.65	9,641.07	1,583.19
Postage.....	51.17	1,500.00		1,551.17		1,500.00		51.17	1,551.17	
Total.....	2,651.54	58,480.00	11.00	61,142.54		51,641.19	2,214.71	722.54	54,578.94	6,563.60
<i>Public schools:</i>										
Salaries, common schools.....	5,018.89	1,228,540.00	1,828.76	1,235,385.69		1,158,216.34	50,103.82	2,310.44	1,210,630.60	24,754.99
Contingent expenses, common schools.....	11.84	6,000.00	9,103.82	15,115.36		14,195.11		1.49	14,196.60	918.78
Text books and school supplies.....	22,394.81	75,000.00	60,410.28	157,715.09		151,573.10		59.40	151,632.50	6,082.59
Salaries, high schools.....	2,872.54	75,000.00	14,460.00	92,332.54		84,140.87	700.65	1,149.12	85,990.64	6,341.80
Contingent expenses, high schools.....	708.70	8,000.00	1,703.54	9,412.33		9,228.04		14.01	9,342.05	70.28
Summer school and institutes.....	3,408.15	2,000.00	1,096.38	3,064.53		2,980.38		84.17	3,064.55	
Common school equipment.....	2,406.88		10,291.22	12,708.10		2,316.23			2,316.23	10,384.55
Extension and development of common and industrial schools.....	115,872.86			115,872.86			114,540.73		114,540.73	1,332.13
Equipment for high schools.....	968.10			968.10		136.63			136.63	771.47
Total.....	149,907.50	1,394,540.00	98,062.00	1,642,509.50		1,422,886.48	165,345.40	3,594.46	1,591,794.34	50,743.16
<i>University of Porto Rico:</i>										
Expenses, University of Porto Rico.....	.37	50,000.00	563.00	50,563.37		50,063.31		.05	50,063.36	500.01
Construction and improvement.....	1.59		140.73	142.32		142.32			142.32	
University fund, indefinite.....		2,896.27		2,896.27			2,896.27		2,896.27	
Total.....	1.96	52,896.27	703.73	53,601.96		50,205.63	2,896.27	.05	53,101.95	500.01
<i>Donation for construction of educational buildings (exclusive of University of Porto Rico):</i>										
Construction of high school in Arecibo.....	70.92			70.92		39.59		31.03	70.92	
Construction of high school building in Mayaguez.....	6,405.25			6,405.25		6,066.69	110.52		6,177.11	428.14

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<sup>1</sup> The appropriations under this head and the University of Porto Rico are not classified with those under "Construction, maintenance, and repair of public buildings" included in the statement of the department of the interior, for the reason that title to all school buildings is vested in the school board act approved Mar. 12, 1903; and those of the university in Rio Piedras in the board of trustees. In consequence, disbursements from these appropriations are considered as extraordinary educational expenses rather than for the acquisition or improvement of edifices on the insular government.

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<i>Department of agriculture and labor—Con.</i>										
Office of the commissioner—Continued.										
Telegraph and telephone.	\$682.47	\$100.00	\$668.40	\$782.47		\$47.81	\$50.00	\$279.63	\$377.44	\$405.03
Incidentals.	153.99	300.00		1,122.39		611.92		37.88	649.80	472.59
<b>Total.</b>	11,961.29	15,980.00	683.40	28,534.69		15,796.93	323.40	831.06	17,061.39	11,533.30
<i>Bureau of agriculture:</i>										
Salaries.		7,920.00		7,920.00		6,721.39	500.00		7,221.39	598.61
Traveling expenses.	27.75	500.00		527.75		434.03	2.09		436.12	91.63
Printing and stationery.		500.00		500.00		123.38	310.00		433.38	66.62
Telegraph and telephone.	5.00	50.00	60.00	115.00		108.51			108.51	6.49
Exhibition supplies.		500.00		500.00		177.81	320.00		497.81	2.19
Incidentals.	4.51	100.00	1,172.09	1,276.60		564.41			564.41	712.19
Lighting and water.		50.00		50.00		19.08			19.08	30.32
Postage and freight.		300.00		300.00		40.34	100.00		140.34	156.66
<b>Total.</b>	37.26	9,820.00	1,232.09	11,089.35		8,159.55	1,232.09		9,421.64	1,657.71
<i>Experimental station and field force:</i>										
Salaries.	866.39	20,380.00		21,246.39		16,622.30	4,350.00		20,772.30	474.09
Farm labor.	75.98	4,000.00		4,075.98		7,025.11			7,025.11	97.64
Traveling expenses.	203.34	2,500.00		2,703.34		1,376.00	1,040.00		2,416.00	287.34
Printing and stationery.	715.67	1,500.00	300.00	2,515.67		1,353.89			1,653.89	861.78
Incidentals.	139.99	1,000.00	1,059.40	2,199.39		2,026.14	47.08		2,073.22	126.17
Supplies.	249.90	1,000.00	2,847.08	4,596.98		3,761.40			3,761.40	835.58
Postage and freight.	102.27	400.00		502.27		291.42	110.00		401.42	100.85
Telegraph and telephone.	40.39	150.00		190.39		126.49			126.49	63.90
Lighting and water.	78.48	150.00		228.48		53.48	90.00		143.48	85.02
Motorcycle supplies.	138.86	100.00		238.86		96.60			96.60	142.26
Maintenance of buildings.		300.00	900.00	1,200.00		1,195.95			1,195.95	4.05
Construction of plant house.	699.99			699.99		698.13			698.13	1.76
<b>Total.</b>	3,311.16	31,980.00	8,153.25	43,444.41		34,626.99	5,787.08		40,363.97	3,080.44

Bureau of labor:	Salaries.....	12,560.00	38.33	12,598.33		11,085.19	710.00	610.91	12,405.19	186.14
	Stationery and printing.....	2,000.00		2,417.76		490.48	900.00		2,001.39	916.37
	Telephone and telephone.....	300.00	100.00	916.41		146.21			223.23	183.18
	Travelling expenses.....	3,000.00	962.70	4,218.53		3,859.93	200.00	68.08	3,928.01	250.82
	Postage and freight.....	500.00		563.89		15.00		393.89	563.00	283.00
	Incidentals.....	500.00	500.00	1,182.36		450.16		42.15	492.31	690.05
<b>Total.....</b>		<b>13,860.00</b>	<b>1,586.03</b>	<b>22,222.58</b>		<b>16,638.97</b>	<b>1,810.00</b>	<b>1,190.05</b>	<b>19,659.02</b>	<b>2,563.56</b>
Miscellaneous:	Expenses, board of agriculture.....		358.78	758.78				758.78	758.78	
	Board of commissioners of agriculture.....		473.22	473.22		136.57			136.57	
	Expenses, commerce commission.....		46.44	46.44				46.46	46.46	
	Inspection of Porto Rican tobacco.....		5,298.10	5,298.10		2,931.38			2,931.38	2,366.72
	Agricultural development in Porto Rico.....		5,186.19	5,186.19				5,186.19	5,186.19	
	Promoting the development of commerce and agriculture in Porto Rico.....		353.86	353.86		227.02		126.84	353.86	
<b>Total.....</b>			<b>358.78</b>	<b>12,116.61</b>		<b>3,294.97</b>		<b>6,118.27</b>	<b>9,413.24</b>	<b>2,703.37</b>
<b>Total, department of agriculture and labor.....</b>		<b>76,550.00</b>	<b>12,013.55</b>	<b>117,407.64</b>		<b>78,567.31</b>	<b>9,102.57</b>	<b>8,189.38</b>	<b>95,859.26</b>	<b>21,548.38</b>
Insular police:	Salaries.....	5,459.75	341.36	404,841.11		393,966.20	3,088.65	1,293.73	398,348.58	6,492.53
	Stationery and printing.....	10.19	1,900.68	4,410.87		4,366.76			4,366.76	6,44.11
	Lighting and water.....	424.29	1.20	4,225.49		3,665.78	100.00		3,765.78	459.71
	Telegraph and telephone.....	277.89	428.05	3,705.94		3,567.20		.60	3,567.80	138.14
	Rent of quarters.....		11.00	14,011.00		13,296.52	700.00		13,996.52	14.48
	Transportation.....	1,024.85	1,000.00	9,024.85		7,477.53			7,477.53	1,547.32
	Care of horses.....	226.22	475.00	8,201.22		6,331.76	1,704.23		8,035.99	165.23
	Automobile supplies and repairs.....	263.70	1,184.66	4,448.36		4,346.39			4,346.39	161.97
	Unexpended property.....	60	.73	6,501.33		5,219.14			5,219.14	1,282.19
	Postage and freight.....	55	515.00	1,365.55		1,364.67		1.83	1,364.67	.88
	Secret and confidential services.....	330.09	52.33	1,382.42		1,000.00			1,001.82	380.60
	Incidentals.....	48.24	1,889.49	3,837.73		3,821.21	800.00	4.28	3,825.49	112.24
	Special guardmen for elections.....	7,997.00		15,997.00		7,192.67			7,992.67	8,004.33
	Additional pay for reenlisting.....		21.62	3,521.62		3,121.32			3,121.32	400.30
	Insular police uniform fund <sup>1</sup> .....	6,837.32	12,628.63	19,386.00		17,884.57			17,884.57	1,501.43
<b>Total Insular police.....</b>		<b>22,920.69</b>	<b>20,349.80</b>	<b>504,860.49</b>		<b>476,621.72</b>	<b>6,392.88</b>	<b>1,300.43</b>	<b>494,315.03</b>	<b>20,645.46</b>
<b>Department of health.</b>										
Office of the commissioner:	Salaries.....	422.37	2,148.83	109,110.70		70,478.71	1,000.00	35,678.80	107,857.51	1,788.19
	Automobile supplies and repairs.....			1,000.00		772.60			772.60	227.40
	Chemicals and disinfectants.....	119.09	750.00	187.69		187.67		24.69	182.86	686.73
	Lighting and water.....	95.76	600.00	695.76		584.83		79.40	584.23	111.53

<sup>1</sup> All expenditures from this appropriation are reimbursable.

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<b>Department of health—Continued.</b>										
Office of the commissioner—Continued.										
Postage and freight.....	\$476.24	\$2,750.00	.....	\$3,226.24	.....	\$1,544.52	\$100.00	\$205.43	\$1,849.95	\$1,876.29
Purchase of vaccine and serums.....	1,204.69	1,500.00	.....	2,704.69	.....	849.45	750.00	318.76	1,418.21	1,286.48
Stationery, printing, and publication of medical bulletin.....	847.96	2,250.00	\$1,159.59	4,257.55	.....	3,084.11	.....	260.97	3,295.08	962.47
Unexpendable property.....	176.84	650.00	750.00	1,576.84	.....	1,135.26	.....	.....	1,014.61	441.58
Purchase of automobiles.....	.....	4,000.00	.....	4,000.00	.....	3,925.00	.....	.....	3,925.00	75.00
Supplies and equipment, bacteriological laboratory.....	149.50	2,250.00	50.00	2,449.50	.....	1,758.64	.....	1.59	1,760.23	689.27
Rent.....	.....	3,500.00	.....	3,500.00	.....	3,180.65	.....	.....	3,180.65	319.35
Supplies and equipment, chemical laboratory.....	429.77	2,000.00	50.00	2,479.77	.....	1,464.66	.....	4.65	1,469.31	1,010.46
Telephone.....	611.56	1,500.00	.....	2,111.56	.....	696.35	.....	258.67	1,014.61	1,156.95
Travelling expenses.....	392.81	8,000.00	.....	8,392.81	.....	7,380.34	.....	7.19	7,387.53	1,005.28
Incidentals.....	199.11	1,000.00	4,200.00	5,399.11	.....	2,472.99	.....	5.41	2,478.40	2,920.71
Labor.....	.....	2,000.00	4,000.00	6,000.00	.....	3,104.35	.....	.....	3,104.35	2,895.65
<b>Total.....</b>	<b>5,125.70</b>	<b>140,350.00</b>	<b>12,357.92</b>	<b>157,833.62</b>	.....	<b>101,960.13</b>	<b>1,900.59</b>	<b>37,045.86</b>	<b>140,915.28</b>	<b>16,918.34</b>
<b>Leprosy colony:</b>										
Salaries.....	9.00	5,931.00	.....	5,940.00	.....	4,234.00	.....	1,700.51	5,934.51	5.49
Subsistence.....	820.72	3,869.50	666.49	10,356.71	.....	7,909.66	.....	280.50	8,190.16	2,166.55
Clothing and bedding.....	286.58	3,000.00	1,200.00	4,486.58	.....	3,232.21	40.00	92.28	3,364.47	1,122.11
Unexpendable property.....	98.80	3,000.00	175.00	1,023.80	.....	612.78	40.00	21.25	674.04	349.76
Incidentals.....	36.46	3,000.00	.....	3,036.46	.....	2,210.00	.....	.....	2,210.00	826.46
<b>Total.....</b>	<b>1,251.56</b>	<b>21,560.50</b>	<b>2,041.49</b>	<b>24,853.55</b>	.....	<b>13,218.65</b>	<b>80.00</b>	<b>2,085.47</b>	<b>20,384.12</b>	<b>4,449.43</b>
<b>Quarantine hospital:</b>										
Salaries.....	129.19	2,598.00	.....	2,697.19	.....	1,708.31	14.30	769.73	2,592.34	116.85
Subsistence.....	349.93	1,200.00	2.00	1,551.93	.....	649.27	263.30	77.01	989.58	562.35
Lighting and water.....	12.36	350.00	26.60	388.96	.....	267.60	.....	7.06	274.66	114.30

Incidentals.....	120.30	250.00	252.00	632.30	.....	515.40	.....	59.48	574.88	57.42
Construction and repairs.....	.....	2,250.00	.....	2,250.00	.....	1,562.22	.....	.....	1,562.22	657.78
<b>Total.....</b>	<b>621.78</b>	<b>6,618.00</b>	<b>280.60</b>	<b>7,520.38</b>	<b>276.60</b>	<b>4,820.80</b>	<b>913.28</b>	<b>6,010.68</b>	<b>1,509.70</b>	<b>1,509.70</b>
<b>Field force:</b>										
Salaries.....	1,395.50	118,620.00	.....	120,235.50	.....	77,197.10	375.00	39,858.40	117,430.50	2,805.00
Killing and burying of animals.....	361.50	225.00	.....	466.50	.....	6.62	.....	293.00	299.62	296.88
Lighting and water.....	136.43	500.00	.....	566.43	.....	29.20	.....	143.22	367.51	191.92
Postage and freight.....	849.23	750.00	.....	1,099.23	.....	314.28	.....	224.71	538.99	480.24
Rent.....	305.36	1,780.00	1,067.00	3,142.36	.....	1,469.81	145.00	1,694.81	1,527.69	1,527.69
Telephone.....	70.36	200.00	.....	270.36	.....	110.83	37.70	141.53	171.23	141.53
Traveling expenses.....	238.72	6,000.00	.....	6,238.72	.....	1,784.17	138.06	1,922.23	4,316.49	4,316.49
Incidentals.....	494.86	12,000.00	900.00	13,384.86	.....	8,928.76	284.61	9,213.37	4,171.49	4,171.49
<b>Total.....</b>	<b>3,365.20</b>	<b>140,285.00</b>	<b>1,967.00</b>	<b>145,617.20</b>	<b>375.00</b>	<b>90,028.88</b>	<b>41,134.70</b>	<b>131,538.58</b>	<b>14,078.62</b>	<b>14,078.62</b>
<b>Suppression of anemia:</b>										
Salaries.....	123.34	.....	.....	123.34	.....	25.00	.....	.....	25.00	98.34
Incidentals.....	1,031.56	.....	.....	1,031.56	.....	328.32	.....	.....	328.32	703.24
Suppression of anemia.....	1,017.64	18,000.00	.....	19,017.64	.....	8,798.51	1,017.54	9,816.05	9,201.49	9,201.49
<b>Total.....</b>	<b>2,172.44</b>	<b>18,000.00</b>	.....	<b>20,172.44</b>	.....	<b>9,151.83</b>	<b>1,017.54</b>	<b>10,196.37</b>	<b>10,003.07</b>	<b>10,003.07</b>
<b>Mosquito extermination:</b>										
Salaries.....	.....	15,165.75	29.74	15,195.49	.....	6,785.84	.....	8,402.65	15,195.49	.....
Traveling expenses.....	.....	1,000.00	553.42	1,553.42	.....	80.45	400.00	.....	480.45	519.55
Incidentals.....	.....	8,834.25	.....	9,387.67	.....	9,329.41	.....	.....	9,329.41	58.26
Mosquito extermination and control and suppression of malaria.....	1,270.20	12,500.00	138.70	13,908.90	.....	8,568.47	.....	8,568.47	5,238.43	5,238.43
<b>Total.....</b>	<b>1,270.20</b>	<b>37,500.00</b>	<b>719.86</b>	<b>38,490.06</b>	<b>400.00</b>	<b>24,764.17</b>	<b>8,406.65</b>	<b>33,573.82</b>	<b>5,916.24</b>	<b>5,916.24</b>
<b>Blind asylum:</b>										
Salaries.....	5.00	13,272.00	.....	13,277.00	.....	9,134.00	.....	4,136.00	13,273.00	4.00
Subsistence.....	1,433.47	15,458.50	.....	16,891.97	.....	8,445.54	725.00	177.67	9,348.21	7,563.76
Clothing and bedding.....	559.65	1,350.00	200.00	2,109.65	.....	1,200.78	.....	101.12	1,301.90	807.75
Unexpended property.....	334.30	300.00	260.00	894.30	.....	518.28	.....	33.57	342.85	342.85
Medical supplies.....	313.78	900.00	560.00	1,263.78	.....	642.92	.....	66.06	708.98	554.80
Fuel.....	56.30	1,000.00	100.00	1,556.30	.....	812.90	12.30	12.30	825.20	231.10
Incidentals.....	66.54	900.00	425.00	1,991.54	.....	1,153.97	.....	54.30	1,208.27	186.27
Water and lighting.....	164.88	750.00	50.00	914.88	.....	327.27	100.00	74.55	413.06	413.06
Transportation of patients.....	370.09	.....	.....	1,170.09	.....	578.65	.....	62.83	771.48	368.61
<b>Total.....</b>	<b>3,307.01</b>	<b>34,680.50</b>	<b>1,085.00</b>	<b>36,072.51</b>	<b>925.00</b>	<b>22,814.31</b>	<b>4,751.40</b>	<b>28,490.71</b>	<b>10,581.80</b>	<b>10,581.80</b>
<b>Insane asylum:</b>										
Salaries.....	19.40	35,176.00	.....	35,195.40	.....	23,283.17	.....	10,985.22	34,278.39	917.01
Subsistence.....	3,068.85	56,611.50	6,704.25	66,394.60	.....	44,474.92	2,727.00	37.86	47,296.78	19,094.82
Clothing and bedding.....	2,238.87	5,100.00	6,704.25	14,043.12	.....	4,345.72	1,000.00	223.55	5,569.27	8,471.85
Fuel.....	145.20	1,500.00	400.00	2,045.20	.....	1,637.29	.....	64.65	1,701.94	343.26
Incidentals.....	264.02	2,250.00	800.00	3,314.02	.....	2,631.34	.....	83.73	2,715.07	2,631.34

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balance unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and trans- fers from other appro- priations.	Total credits.	Dr. balances indefinite appropriations July 1, 1917.	Cash dis- bursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<i>Department of health—continued.</i>										
<i>Insane asylum—Continued.</i>										
Water and lighting.....	\$412.67	\$3,000.00	.....	\$3,412.67	.....	\$2,043.58	.....	.....	\$2,043.58	\$1,369.09
Medicines and supplies.....	634.33	1,600.00	\$300.00	2,334.33	.....	1,434.73	.....	\$78.98	1,513.71	800.69
Transportation of patients.....	204.81	3,000.00	.....	3,204.81	.....	673.40	.....	92.35	765.75	2,438.55
Unexpendable property.....	865.84	1,600.00	100.00	2,635.84	.....	1,279.57	.....	27.20	1,306.77	1,329.07
<b>Total.....</b>	<b>7,773.56</b>	<b>109,787.50</b>	<b>15,098.50</b>	<b>132,569.56</b>	.....	<b>81,833.83</b>	<b>\$3,727.00</b>	<b>11,643.54</b>	<b>97,204.37</b>	<b>35,365.19</b>
<i>Girls' charity school:</i>										
Salaries.....	29.00	13,092.00	.....	13,121.00	.....	12,996.66	.....	27.00	13,023.66	97.34
Subsistence.....	1,228.57	20,367.00	.....	21,595.57	.....	13,594.82	5,500.00	338.93	19,433.75	2,161.82
Contingent expenses.....	.....	4,000.00	5,500.00	9,500.00	.....	6,596.26	.....	.....	6,596.26	2,913.74
Clothing and bedding.....	698.61	.....	.....	698.61	.....	411.60	.....	48.72	460.37	238.24
Textbooks and school supplies.....	31.69	.....	.....	31.69	.....	.....	.....	30.07	30.07	148.29
Unexpendable property.....	101.27	46.57	.....	147.84	.....	162.02	.....	1.62	163.64	65.25
Medicines.....	46.57	.....	.....	46.57	.....	36.02	.....	3.43	39.45	3.43
Fuel.....	126.34	.....	.....	126.34	.....	33.20	.....	33.20	33.20	93.05
Incidentals.....	13.57	.....	.....	13.57	.....	5.50	.....	2.09	7.59	5.98
Water and lighting.....	37.55	.....	.....	37.55	.....	.....	.....	25.60	25.60	11.95
<b>Total.....</b>	<b>2,223.17</b>	<b>37,459.00</b>	<b>5,500.00</b>	<b>45,182.17</b>	.....	<b>33,594.84</b>	<b>5,500.00</b>	<b>584.86</b>	<b>39,679.70</b>	<b>5,502.47</b>
<i>Boys' charity school:</i>										
Salaries.....	211.64	20,856.00	.....	21,067.64	.....	20,475.65	.....	35.30	20,510.95	556.69
Subsistence.....	1,936.31	28,689.00	.....	30,625.31	.....	18,642.44	7,000.00	110.70	25,753.14	4,872.17
Contingent expenses.....	.....	10,500.00	7,000.00	17,500.00	.....	9,974.52	.....	.....	9,974.52	7,525.48
Clothing and bedding.....	341.64	.....	.....	341.64	.....	13.10	.....	110.65	123.75	217.89
Textbooks and school supplies.....	145.65	.....	.....	145.65	.....	22.38	.....	93.47	115.85	20.80
Unexpendable property.....	244.42	.....	.....	244.42	.....	6.96	.....	63.15	70.11	174.31
Medicines.....	275.48	.....	.....	275.48	.....	16.10	.....	207.47	222.57	52.91
Fuel.....	220.88	.....	.....	220.88	.....	31.25	.....	154.84	186.09	34.79
Incidentals.....	63.57	.....	.....	63.57	.....	31.25	.....	32.68	33.69	29.88
Equipment.....	1,491.35	.....	.....	1,491.35	.....	1,072.05	.....	10.00	1,082.05	409.30

Water.....	81.08				81.08				24.68	56.40
Lighting.....	90.97				90.97				17.66	73.31
<b>Total.....</b>	<b>5,102.99</b>	<b>60,045.00</b>	<b>7,000.00</b>	<b>72,147.99</b>				<b>7,000.00</b>	<b>58,116.06</b>	<b>14,031.93</b>
Miscellaneous:										
Emergency fund for the control and suppression of epidemics.....	30,545.59		2,057.00	32,602.59					8,213.10	24,388.49
Rat extermination.....	617.47		300.00	917.47					767.52	149.95
Suppression of measles.....	33,474.93		32,884.22	66,359.15					11,194.87	66,359.15
Care of tuberculosis patients.....		45,000.00	576.00	45,576.00						23,515.94
Education and support of poor deaf-mute children.....		1,800.00		1,800.00						600.00
<b>Total.....</b>	<b>64,637.99</b>	<b>46,800.00</b>	<b>36,117.22</b>	<b>147,555.21</b>				<b>50,255.46</b>	<b>11,194.87</b>	<b>48,655.38</b>
Total, department of health.....	96,851.60	653,075.50	82,077.59	832,004.69				42,672.22	664,992.52	167,012.17
Civil service commission:										
Salaries.....	298.35	6,580.00		6,878.35					126.00	448.98
Incidentals.....	400.03	1,100.00		1,500.03					136.47	630.51
<b>Total.....</b>	<b>698.38</b>	<b>7,680.00</b>		<b>8,378.38</b>				<b>7,035.42</b>	<b>265.47</b>	<b>1,077.49</b>
Institute of Tropical Medicine and Hygiene of Porto Rico:										
Salaries.....	10,180.00			10,180.00						157.00
Stationery and printing.....	878.28	300.00		1,178.28						973.72
Lighting, gas, and water.....	6.52	200.00	67.10	273.62				90.00	204.56	34.77
Telephone and telegraph.....	26.80	100.00	2.00	128.80				27.00	101.85	26.95
Traveling expenses.....		500.00		500.00				494.00	500.00	
Care of experimental animals.....	1.07	200.00	50.00	311.07						9.23
Unexpended property.....	41	200.00		241.00					96.78	103.63
Postage and freight.....	3.37	100.00		103.37					96.96	3.41
Incidentals.....	13.45	200.00		213.45					173.23	40.22
Purchase of experimental animals.....	23.10	200.00		223.10				150.00	63.16	63.94
Instrument, reagents, apparatus.....		500.00	594.00	1,094.00					571.42	522.58
Library.....	165.20	100.00	11.00	276.20				2.00	276.20	69.85
Culture media and ice.....	13.22	300.00		313.22					321.38	91.84
Supplies.....	184.24		1.00	185.24					171.60	63.64
Medicines.....	4.50	100.00		104.50					101.83	62.67
Miscellaneous expenses.....		1,500.00		1,500.00				250.00	1,424.80	75.20
Institute of Tropical Medicine and Hygiene of Porto Rico.....	211.03			211.03					88.29	
<b>Total, Institute of Tropical Medicine and Hygiene of Porto Rico.....</b>	<b>1,539.19</b>	<b>14,740.00</b>	<b>1,025.00</b>	<b>17,304.19</b>				<b>1,013.00</b>	<b>14,992.44</b>	<b>2,311.75</b>

**Last year under "General miscellaneous."**



EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balances unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. Balances indefinite appropriations, July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>EXECUTIVE—continued.</b>										
<i>Department of health—Continued.</i>										
General miscellaneous:										
Miscellaneous expenditures subject to the approval of the governor.....	\$4,096.39	\$20,000.00	\$6,514.73	\$31,124.02		\$5,890.57	\$17,985.02	\$606.55	\$24,452.14	\$6,672.48
Salary of historian.....		1,500.00		1,500.00		1,500.00			1,500.00	50.00
Scholarship for José Colón Roman.....		600.00		600.00		550.00			550.00	400.00
Scholarship for Eutimio Becerra.....		400.00		400.00						
Scholarship for Ricardo Hernández Romero.....		600.00		600.00		550.00			550.00	50.00
Scholarship for Jesús María Saurimón.....		600.00		600.00		600.00			600.00	1,200.00
Botanical expert.....		1,200.00		1,200.00						
Adjust claims against the late diputación provincial and boards of prison control.....	2,479.29			2,479.29				2,479.29	2,479.29	
Purchase Hotel.....	200,000.00			200,000.00				200,000.00	200,000.00	
Provision for the transfer of other claims of Dr. Ramón Emeterio Betances.....	1,000.00			1,000.00						1,000.00
Expenses of commissions and investigative appropriations and expenditures of the insular government.....	7,188.28			7,188.28		190.15		1,148.39	1,338.54	5,849.74
Refunding bond expense.....	8,675.66			8,675.66		2.06			2.06	8,673.60
Irrigation investigating commission.....	284.83			284.83		284.83		1.25	284.83	
Expenses of election in Porto Rico.....	17,492.87			31,935.87		25,468.28	6,500.00		31,568.28	367.59
Expenses Insular Bank of Porto Rico.....	20,000.00	7,500.00	6,503.00	20,000.00						20,000.00
Commission to investigate purchases made by officials of the insular government.....	1,000.00			1,000.00				1,000.00	1,000.00	
Expenses sale of bonds for roads.....	9,224.01		775.99	10,000.00						10,000.00
Survey of the natural resources of Porto Rico and collection of exhibits in cooperation with the New York Academy of Science.....	279.32			279.32				279.32	279.32	
Paving and maintaining Ponce de Leon Avenue.....	100,000.00			100,000.00						100,000.00
Municipal proportion on conditional sales, Act No. 61, Laws 1916.....		.50		.50		.50			.50	

Emergency fund subject to allotment by the governor and approval by the executive council.....	1,985.46				1,985.46				1,000.00		985.46
Promote the cultivation of new crops and forest reserves.....	5,000.00				5,000.00						5,000.00
Expenses of commission to Washington to promote the passage of the Jones bill.....	1,735.00				1,735.00				1,735.00		
National guard of Porto Rico fund.....	10,000.00				10,000.00						7,480.59
Food commission special fund.....	5,000.00				5,000.00						5,000.00
Repairs to school buildings in Naranjo.....	1,000.00				1,024.88						338.08
Special fund for the construction of hospital in Cabo Rojo.....	2,000.00				2,000.00						2,000.00
Medical, dental, and pharmaceutical boards—											
Fees and expenses, board of medical examiners.....		857.19			857.19						
Fees and expenses, board of dental examiners.....		422.28			422.28						
Fees and expenses, board of pharmacy.....		1,096.71		.32	1,097.03						
Relief of minor (grand) children of Román Baldorioty de Castro.....	100.01				100.01				100.01		100.01
Relief of Fernando Montilla.....				900.00	900.00						900.00
Subvention to Liga Antituberculosa de Porto Rico.....	5,000.00				5,000.00						5,000.00
Subvention to Asilo de Ancianos Desamparados.....	400.00				400.00						400.00
Subvention to Ponce Orphanage.....	400.00				400.00						400.00
Settlement of claims of Sabas Honoré against the people of Porto Rico.....	2,000.00				2,000.00						2,000.00
Compensation for the lives of members of the Insular police.....		2,000.00			2,000.00						
Premium upon bonds of employees of the Insular government.....		4,766.87			4,766.87						
Relief of municipalities.....	138,290.53			11,677.31	149,967.84						4,766.87
Relief of school boards.....	26,583.32			2,533.32	29,066.64						149,976.84
Refund of taxes improperly collected.....		47,672.03			47,672.03						29,066.64
Interest, refunding bonds.....		60,000.00			60,000.00						
Interest, public improvement bonds.....		50,200.00			50,200.00				176.94		47,672.03
Redemption of National bonds under Act No. 120 of Laws of 1913.....		19,643.33			19,643.33						60,000.00
Relief of Pedro H. Laws of 1913.....		30,000.00			30,000.00						50,200.00
Principal refunding bonds.....		30,000.00			30,000.00						
Irrigation service advances.....		55,000.00			70,000.00						
Total, general miscellaneous.....	407,294.62	429,391.76	84,429.55		921,115.93	94,216.69			207,586.73		738,248.39
Total, executive.....	2,122,330.12	4,839,551.91	1,527,220.54		8,489,111.57	94,216.69	5,716,884.50		306,118.70	6,672,613.28	1,816,498.29

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918.

Description.	Balances unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. Balances indefinite appropriations, July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balance unexpended June 30, 1918.
<b>JUDICIAL.</b>										
United States District Court for the District of Porto Rico:										
Salaries.....	\$11,487.99			\$11,487.99				\$8.99	\$28.99	\$11,487.99
Purchase of law books.....	8.99			8.99				126.89	16.39	136.82
Traveling expenses, marshals.....	263.21			263.21				190.43	431.88	431.88
Incidental expenses of the court.....	622.31			622.31				196.23	196.23	646.61
Traveling expenses of the court.....	842.84			842.84						46.63
Incidental expenses of judge's office.....	46.63			46.63						100.37
Incidentals of district attorney's office.....	100.37			100.37						26.00
Pay to bailiffs.....	26.00			26.00				629.74	629.74	1,901.39
Fees and mileage of witnesses.....	2,531.13			2,531.13				203.12	203.12	2,320.90
Fees and mileage of jurors.....	2,524.02			2,524.02				113.68	235.28	330.40
Fees United States commissioners.....	565.68			565.68						
Total, United States district court.....	19,022.17			19,022.17		121.60		1,468.58	1,660.18	17,431.99
<i>Insular courts.</i>										
Supreme court:										
Salaries.....	317.65	\$52,660.00		52,977.65		51,080.43	\$1,454.89		52,485.12	492.53
Incidentals.....	186.72	1,400.00		1,586.72		1,206.90	44.70		1,250.60	308.12
Purchase of law books.....	48.83	500.00	\$1,470.86	2,019.88		1,976.80			1,976.80	42.88
Water.....	5.32	20.00		25.32		19.84	3.76		26.60	1.72
Lighting.....	5.40	50.00		55.40		79.04			79.04	8.96
Printing and publication of Digest of Porto Rico Reports on Appeals from Decisions of the Registrars of Property.....			32.60	32.60						
Total.....	4.59			4.59				4.59	4.59	
Publication of the decisions of the supreme court:										
Salaries.....	540.51	54,630.00	1,503.15	56,673.66		54,311.71	1,503.15	4.59	55,819.45	854.21
Total.....		6,200.00		6,200.00		5,607.50			5,607.50	692.50

Incidentals.....	6,895.20	7,000.00	13,895.20	4,395.59	4,395.59	9,495.61
Attorneys.....	36.76	1,000.00	1,036.76	749.09	749.09	310.67
Publication of the Decisions of the Supreme Court.....	67.69		67.69	20.60	20.60	47.09
Total.....	7,022.65	14,200.00	21,222.65	10,673.78	10,673.78	10,548.87
District courts:						
Salaries—						
San Juan.....	5.33	32,550.00	32,555.33	31,791.71	31,791.71	763.62
Ponce.....		17,130.00	17,130.00	16,559.16	16,559.16	570.84
Mayaguez.....	100.00	15,110.00	15,210.00	15,104.67	15,104.67	105.33
Arecibo.....		14,600.00	14,600.00	14,600.00	14,600.00	
Humacao.....		14,910.00	14,915.33	14,655.76	14,655.76	259.57
Guayama.....	36.67	14,600.00	14,636.67	14,027.50	14,027.50	609.17
Aguaadilla.....	5.00	14,600.00	14,605.00	14,565.28	14,565.28	39.72
Purchase of law books.....	200.50	500.00	700.50	701.00	701.00	135.93
Postage.....	10.00	750.00	760.00	755.00	755.00	5.00
Incidentals.....	530.32	5,000.00	5,530.32	5,262.86	5,262.86	267.41
Water.....	156.81	250.00	406.81	182.65	182.65	224.16
Lighting.....	38.10	250.00	288.10	210.62	210.62	77.48
Rent.....		1,580.00	1,622.50	1,622.50	1,622.50	
Traveling expenses, judges and fiscals.	335.30	2,000.00	2,335.30	1,742.02	1,742.02	593.28
Care of horses.....	7.10	1,380.00	1,387.10	1,377.50	1,377.50	9.60
Traveling expenses, marshals.....	126.90	200.00	326.90	1,587.72	1,587.72	1,260.82
Autofletes and exhumations.....	297.33	1,250.00	1,547.33	1,068.00	1,068.00	479.33
Fees of defense witnesses in criminal cases.....		10,000.00	10,000.00			10,000.00
Fees of jurors.....	13,181.02	24,000.00	41,531.02	16,913.63	16,913.63	24,617.39
Fees of witnesses in cases of lunacy.....	554.00	500.00	1,054.00	1,000.00	1,000.00	54.00
Fees of witnesses.....	8,626.84	20,000.00	32,126.84	21,776.44	21,776.44	10,350.40
Total.....	24,214.22	191,340.00	225,022.05	174,780.69	174,780.69	50,241.36
Municipal courts:						
Salaries.....	56.66	101,560.00	101,616.66	99,770.17	99,770.17	1,846.49
Incidentals.....	1,189.08	5,000.00	6,189.08	4,722.64	4,722.64	1,466.44
Rent.....		7,262.00	7,262.00	6,953.20	6,953.20	308.80
Traveling expenses, court officials.....	384.12	3,500.00	4,434.12	3,650.21	3,650.21	783.91
Care of horses.....	4.40	3,346.00	3,350.40	3,321.54	3,321.54	28.86
Traveling expenses, marshals.....	64.87	1,800.00	1,864.87	1,782.34	1,782.34	82.53
Fees of witnesses.....	86.45	2,000.00	2,086.45	2,162.38	2,162.38	75.93
Total.....	1,691.53	124,518.00	127,355.33	123,162.43	123,162.43	4,192.90
Total, insular courts.....	33,463.91	394,668.00	430,303.09	361,596.66	361,596.66	68,705.43

EXHIBIT No. 24.—Consolidated statement of insular revenue appropriations for the fiscal years 1917-18, 1916-17, 1915-16, no fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1918—Continued.

Description.	Balances unexpended July 1, 1917.	Appropriations effective since July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. Balances indefinite appropriations, July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debts.	Balance unexpended June 30, 1918.
<b>JUDICIAL—continued.</b>										
<i>District courts—Continued</i>										
Registrars of property:										
Salaries—										
San Juan.....	\$5.00	\$13,740.00		\$13,745.00		\$13,518.88		\$5.00	\$13,523.88	\$221.12
Ponce.....		6,050.00		6,050.00		6,050.00			6,050.00	
Mayaguez.....	30.56	5,450.00		5,480.56		5,450.00			5,450.00	30.56
Arecibo.....		6,050.00		6,050.00		6,049.99			6,049.99	.01
San Germán.....		4,420.00		4,420.00		4,420.00			4,420.00	
Humacao.....		4,420.00		4,420.00		4,289.73			4,289.73	130.27
Caguas.....	43.33	4,420.00		4,463.33		4,420.00		43.33	4,463.33	
Guayama.....		4,420.00		4,420.00		4,385.00			4,385.00	35.00
Aguadilla.....		3,890.00		3,890.00		3,890.00			3,890.00	
Clerk at large for registrars of property.....		600.00		600.00		551.67			551.67	48.33
Incidentals.....	896.20	2,800.00		3,696.20		3,072.96		9.48	3,082.43	613.77
Rent.....	23.83	3,060.00	\$80.00	3,163.83		3,140.00		23.83	3,163.83	
Total, registrars of property.....	998.92	59,250.00	80.00	60,328.92		59,168.22		81.64	59,249.86	1,079.06
Total, judicial.....	53,490.00	443,908.00	12,226.78	509,624.78		421,188.46		8,931.43	435,670.56	73,954.22
Grand total.....	2,187,961.42	5,414,680.96	1,542,532.84	9,145,134.24	\$64,216.60	6,262,708.26	509,899.73	377,772.90	7,228,857.57	1,916,506.67

EXHIBIT No. 25.—Recapitulation by departments.

Departments.	Balance unexpended July 1, 1917.	Appropriations effective July 1, 1917.	Repayments and transfers from other appropriations.	Total credits.	Dr. balance indefinite appropriations July 1, 1917.	Cash disbursements.	Transfers to other appropriations.	Lapses.	Total debits.	Balances unexpended June 30, 1918.
<b>LEGISLATIVE.</b>										
Executive council.....	86,684.88	83,637.29	\$60.83	\$12,345.00	.....	82,885.84	\$745.71	\$2,409.66	86,061.21	96,303.79
House of Delegates.....	1,414.81	1,776.98	88.99	3,290.78	.....	1,884.66	388.99	294.52	2,018.15	2,022.47
Senate of Porto Rico.....	44,550.00	44,550.00	1,225.75	45,775.75	.....	36,484.48	360.00	.....	36,844.48	4,965.23
House of Representatives.....	53,885.80	53,885.80	1,650.99	55,536.79	.....	49,793.15	1,650.99	.....	51,444.14	2,411.65
Miscellaneous legislative.....	2,069.61	277,300.00	50.00	28,409.61	.....	23,662.17	.....	18.59	23,680.76	5,728.86
Total legislative.....	12,141.30	131,150.07	3,076.52	146,397.89	.....	114,635.27	2,885.69	2,722.77	120,253.73	26,114.16
<b>EXECUTIVE.</b>										
Office of the governor.....	1,023.77	29,310.00	4,209.52	34,543.29	.....	31,716.80	347.41	262.05	32,326.26	2,217.03
Office of the executive secretary.....	22,009.85	83,610.00	947,139.98	1,052,759.83	.....	1,024,184.26	22,190.02	1,064.27	1,047,428.55	5,331.28
Office of the attorney general.....	21,739.70	298,148.04	28,114.83	348,002.57	.....	296,618.17	24,017.25	4,961.24	315,596.66	32,405.91
Office of the treasurer.....	11,159.91	257,640.34	7,965.00	276,765.25	.....	250,738.53	7,875.00	521.96	259,135.49	17,659.76
Office of the auditor.....	4,475.75	84,170.00	4,441.12	83,066.87	.....	76,564.63	4,347.12	15.06	80,918.81	12,170.06
Department of the interior.....	1,223,606.29	917,480.00	236,624.87	2,377,111.16	.....	1,097,381.54	91,180.81	16,905.29	1,205,477.64	1,172,283.52
Department of education.....	274,919.60	1,506,416.27	98,776.73	1,880,112.60	.....	1,535,065.74	170,568.90	5,183.83	1,710,826.57	1,169,286.03
Carnegie library.....	4,817.25	15,440.00	82.00	20,289.25	.....	11,325.26	.....	.....	11,325.26	8,963.99
Government of the island of Culebra.....	4,429.43	4,210.00	.....	4,639.43	.....	3,748.38	.....	123.13	3,871.51	7,767.92
Department of agriculture and labor.....	28,844.09	76,550.00	12,013.55	117,407.64	.....	78,567.31	9,102.57	8,189.38	96,596.26	21,548.38
Insular police.....	22,920.69	461,690.00	20,349.80	504,960.49	.....	476,621.72	6,392.88	1,300.43	484,315.03	20,645.46
Department of health.....	96,851.60	653,075.50	82,077.59	832,004.69	.....	482,475.64	62,865.41	119,651.47	664,992.52	167,012.17
Civil service commission.....	698.38	7,690.00	.....	8,378.38	.....	7,035.42	.....	265.47	7,300.89	1,077.49
Institute of Tropical Medicine and Hygiene of Porto Rico.....	1,539.19	14,740.00	1,025.00	17,304.19	.....	13,891.15	1,013.00	88.29	14,992.44	2,311.75
General miscellaneous.....	407,294.62	429,391.76	84,429.55	921,115.93	994,216.69	340,969.95	95,485.02	207,586.73	738,248.39	182,867.54
Total executive.....	2,122,330.12	4,839,551.91	1,527,229.54	8,490,111.57	94,216.69	6,716,884.50	495,393.39	366,118.70	6,672,613.28	1,816,498.29
<b>JUDICIAL.</b>										
United States district court.....	19,022.17	.....	.....	19,022.17	.....	.....	.....	.....	.....	17,431.99
Insular courts.....	33,468.91	384,688.00	12,146.78	430,303.69	.....	361,898.66	5,580.65	7,381.21	374,830.52	55,473.17
Registrars of property.....	998.92	59,200.00	80.00	60,328.92	.....	59,108.22	.....	81.64	59,249.86	1,076.06
Total judicial.....	53,490.00	443,938.00	12,228.78	509,654.78	.....	421,188.48	5,580.65	8,931.43	435,670.56	73,984.22
Grand total.....	2,187,961.42	6,414,639.98	1,542,582.84	9,145,134.24	94,216.69	6,262,708.25	503,839.73	377,772.90	7,228,337.57	1,916,598.67

EXHIBIT No. 26.—Recapitulation by fiscal years.

Appropriations.	Balance unexpended July 1, 1917.	Appropriations encumbered July 1, 1917. <sup>1</sup>	Repayments and transfers from other appropriations.	Total credits.	Dr. balance indefinite appropriations July 1, 1917.	Cash disbursements. <sup>2</sup>	Lapses.	Transfers to other appropriations.	Total debts.	Balances unexpended June 30, 1918.
Fiscal year 1917-18.....		\$4,985,305.57	\$331,003.43	\$5,316,309.00		\$4,631,173.14	\$114,369.34	\$228,544.42	\$4,972,086.90	\$344,222.10
Fiscal year 1916-17.....	\$237,523.39		35,216.82	320,740.21		139,772.78		56,313.06	198,387.84	122,162.37
Fiscal year 1915-16.....	82,282.06		1,465.45	43,747.51		2,350.78		483.89	43,747.51	
No fiscal year.....	1,838,185.97	16,000.00	1,107,600.39	2,981,786.36		1,164,670.28	227,286.78	144,600.09	1,531,364.16	1,450,222.20
Indefinite.....										
Relief of municipalities.....		\$138,299.53	11,677.31	149,976.84	\$90,150.05	59,826.79			149,976.84	
Relief of school boards.....		\$26,523.32	2,523.32	29,046.64	4,066.64	25,000.00			29,046.64	
Miscellaneous.....		248,501.56	55,004.12	303,507.68		230,434.47		72,804.27	303,507.68	
Total.....	2,187,981.42	5,414,639.98	1,542,532.84	9,145,134.24	94,216.69	6,282,708.25	377,772.90	503,839.73	7,228,337.57	1,916,596.67

<sup>1</sup> This column covers appropriations made during the legislative session of February-April, 1917, and subsequently, for the fiscal year 1917-18, to cover deficiencies of that year and other years, for no definite fiscal year, and in addition appropriations authorized during past and present years to meet expenditures from indefinite appropriations.

<sup>2</sup> Cash disbursements include advances to disbursing officers and not their net disbursements. They are required to repay all unexpended balances at the close of the year, and the amounts are included in the column for repayments. This is done to agree with the total of cash repayments and disbursements of Exhibit No. 22.

<sup>3</sup> No appropriation warrants are necessary for these two appropriations, representing loans to municipalities and school boards, because they are indefinite no-fiscal year appropriations, and the repayment of the loans would close them. The credits by appropriations are given here to offset the debit balances in the accounts, which would otherwise falsely reduce the combined balances of all classes unexpended June 30, 1918.

INSULAR REVENUES.

EXHIBIT No. 27.—Statement of cash receipts and disbursements, from July 1, 1913, to June 30, 1918, by years.

[Not to be confused with accrued revenues, Exhibit No. 4 and accrued expenses, Exhibit No. 5.]

	1914	1915	1916	1917	1918
Balance on hand beginning of period.....	\$980,024.91	\$283,273.23	\$575,310.54	\$159,767.10	\$581,476.17
<b>RECEIPTS.</b>					
Excess over legal municipal and school board maxima (Law No. 70 of 1916).....					426,278.19
United States Internal revenues.....					1,089,686.40
Customs.....					370,000.00
Property taxes, Insular proportion.....	674,000.00	350,753.16	295,500.00	378,000.00	
Excise taxes:	186,086.99	176,623.61	184,423.37	685,764.38	229,024.24
Tobacco stamps.....	1,166,212.22	968,065.14	945,840.82	1,060,244.74	1,051,300.09
Other stamps.....	1,677,349.24	1,682,844.19	1,731,769.69	1,840,742.21	1,086,445.69
Inheritance taxes.....	26,967.05	33,431.65	17,390.52	84,660.27	52,706.06
Telegraph and telephone receipts.....	68,797.68	74,640.28	71,836.21	87,110.52	96,961.79
Court fines and fees.....	115,896.11	100,529.15	1 05,098.39	1 47,415.74	41,879.34
Harbor and dock fees.....	21,936.27	22,467.78	25,418.61	28,134.64	24,376.77
Interest.....	84,790.49	98,616.53	125,894.52	141,333.67	156,016.33
Industrial and commercial license taxes.....	281,417.59	926.89	1 25	98.75	
Income tax.....	80,423.87	70,696.55	186,333.26	410,107.32	666,881.93
Proportion of municipal income for sanitation.....	279,232.20	110,478.55	108,086.67	121,694.31	119,726.05
Miscellaneous.....	171,942.99	2,271,060.41	4 492,321.57	4 494,124.46	166,948.40
Total Insular revenues.....	4,763,902.70	5,977,102.89	4,202,934.38	5,269,418.21	5,426,079.28
Repayments on loans by municipalities and school boards:					
Cash.....	74,500.65	135,374.20	69,580.38	135,189.59	14,210.63
Bonds.....	962,000.00	236,000.00	435,500.00	473,000.00	
Miscellaneous repayments and transfers.....	773,362.33	853,279.84	311,345.09	264,133.22	198,917.06
Bureau of supplies, printing and transportation, repayments.....	271,122.84	355,966.24	342,041.05	604,347.72	868,461.69
Total revenues and repayments.....	6,784,948.57	7,528,707.17	5,361,380.90	6,768,068.74	6,537,668.66
Total.....	7,714,973.48	7,811,980.40	5,936,691.44	6,927,835.84	7,119,144.83

<sup>a</sup> The decrease in these amounts is due to the change in the law requiring that amounts received as fees in civil cases be paid in internal revenue stamps. Such payments are included in the item "Excise taxes, other stamps."

<sup>b</sup> This amount includes \$500.27 interest paid by The Mechanics & Metals National Bank of New York to the people of Porto Rico; \$768,019.74, part of proceeds from sale of \$1,000,000 public improvement bonds; \$641,719.16, proceeds from sale of \$655,000 refunding bonds.

<sup>c</sup> This amount includes \$100,000 repaid by irrigation service on account of loan made during fiscal year 1914-15; \$299,656.67, proceeds from sale of \$300,000 refunding bonds.

<sup>d</sup> This amount includes \$301,733.33, proceeds from sale of \$300,000 refunding bonds.



EXHIBIT No. 27.—Statement of receipts and disbursements from July 1, 1913, to June 30, 1918, by years—Continued.

	1914	1915	1916	1917	1918
<b>DISBURSEMENTS.</b>					
<b>Legislative:</b>					
Executive council.....	\$30,324.02	\$35,876.10	\$33,737.00	\$31,924.15	\$2,883.84
House of delegates.....	41,898.24	29,934.77	33,775.00	31,061.49	1,834.60
Senate of Porto Rico.....					36,484.48
House of representatives.....					49,793.18
Miscellaneous legislative: Printing and publication of laws, etc.....					23,662.17
<b>Executive:</b>					
Office of the governor and secretary (exclusive of bureau of supplies, printing, and transportation).....	2,344.81	1,446.78	4,016.23	458.98	
Office of the attorney general.....	98,081.01	77,277.30	86,273.87	88,255.64	83,420.75
Office of the auditor.....	43,406.40	36,259.63	37,067.50	43,001.22	86,712.30
Penal institutions.....					216,698.03
Maintenance of prisoners in municipal jails.....	12,665.48	12,977.17	15,286.71	13,466.89	13,237.84
Office of the treasurer.....	280,733.48	280,568.12	211,271.85	291,575.37	290,733.53
Office of the auditor.....	96,273.49	63,218.69	89,740.86	85,064.45	76,554.63
Department of the interior—					
Office of the commissioner.....	109,722.19	87,531.09	85,648.58	96,019.42	114,964.27
Maintenance and repair of public roads and bridges.....	769,674.34	465,297.10	441,760.09	676,465.74	786,911.45
Maintenance and repair of public buildings.....	149,961.11	35,564.84	89,706.62	66,865.36	98,418.44
Insular telegraph.....	88,508.92	72,807.40	71,674.29	83,945.19	99,763.09
Construction, maintenance, and repair of harbor improvements.....			442.74	4,646.32	3,004.75
Miscellaneous.....	50,769.02	19,338.86	40,553.06	66,046.21	49,331.54
Department of education—					
Office of the commissioner.....	62,733.53	54,273.05	43,546.87	43,604.98	51,641.69
Public schools.....	1,600,821.24	1,290,917.46	1,193,260.53	1,241,535.96	1,422,866.48
University of Porto Rico.....	57,744.68	57,744.68	54,762.01	54,804.98	50,331.63
Miscellaneous (includes donations for educational buildings).....	97,698.58	50,019.92	6,213.17	10,321.24	10,321.24
Insular library.....	6,698.24	9,213.17	9,213.17	2,200.53	1,321.34
Government of the island of Guahira.....	2,970.02	2,136.13	3,798.87	3,693.70	5,748.38
Department of labor, charities, and correction: General.....	489,729.06	372,577.31	385,282.74	349,071.90	
Department of agriculture and labor.....					
Insular police.....					78,567.31
Department of health.....	528,303.20	488,480.82	441,265.53	431,146.37	476,621.72
General.....					
Suppression of anemia.....	570,231.10	290,545.58	200,535.44	224,923.01	473,233.81
Commercial and agricultural development.....	15,242.53	9,840.65	6,860.55	7,626.86	9,151.83
Civil service commissions.....	48,637.36	82,236.67	37,563.87	42,745.46	
Loans to municipalities (under miscellaneous).....	10,094.82	8,355.53	7,013.33	6,734.28	7,033.42
Loans to school boards (under miscellaneous).....	427,284.14	284,727.15	373,950.00	150,748.96	59,826.70
Loans to school boards (under miscellaneous).....	156,379.11	90,380.49	76,000.00	324,000.00	25,000.00
Miscellaneous (unassigned).....	20,371.21				
Purchases and expenses, bureau of supplies, printing, and transportation.....	731,768.58	333,885.66	343,766.00	704,196.79	972,430.31
Election expenses.....	64,256.80	23,431.21	23,431.21	25,068.28	25,068.28
Miscellaneous (see also Loans to municipalities and school boards), general.....	91,267.04	567,021.55	131,486.07	180,320.64	244,966.63

Other disbursements.....	2,500.00	96,000.00	28,500.00	119,000.00	86,000.00
Insular fair (\$510.88) for buildings under department of the interior.....	9,723.14				
Transfers.....	150,871.79	1,544,234.90	783,415.96	324,779.18	72,896.27
Judicial:					
General.....	527,252.15	493,808.08	460,770.08	423,076.16	491,188.48
Total disbursements, loans, and transfers.....	7,431,700.25	7,235,099.86	5,778,924.34	6,346,359.67	6,410,604.52
Balance on hand June 30.....	283,273.23	575,310.54	169,767.10	861,476.17	708,540.31
Total.....	7,714,973.48	7,811,980.40	5,948,691.44	6,927,835.84	7,119,114.83

<sup>1</sup> Municipal and school board bonds redeemed.

NOTE.—This statement is stated in the form of previous years for comparison, and the classifications do not exactly agree with the statements of the current year. This and the following statement are not for income and expenses, but for cash receipts and disbursements vastly different in their nature.

## TRUST FUND.

EXHIBIT No. 28.—Statement of receipts and disbursements from July 1, 1913, to June 30, 1918, by years.

[Not to be confused with expense accounts of Exhibit No. 5.]

Description.	1914	1915	1916	1917	1918	Balance June 30, 1918.
Balance on hand at the beginning of period.	\$1,452,332.18	\$1,154,085.08	\$2,097,158.24	\$2,741,881.03	\$3,524,399.38	
<b>RECEIPTS.</b>						
<b>Municipal bond redemption tax:</b>						
San Juan.	33,094.66	33,398.47	31,948.63	88,322.44	96,028.00	
Mayaguez.	49.88	42.70	78.79	19.09		
Ponce.	15,264.86	15,045.28	15,569.89	99.59		
Artocho.	6,341.87	7,467.21	7,114.33	3,718.95	12.73	
Barrio.			9,707.00	882.79	840.51	
Guayniquitas.			9,509.45	5,550.38	4,915.67	
Guayama.			1,392.50	1,392.50	1,681.09	
Munabo.			1,288.38	1,990.00	1,641.17	
Arroyo.					27,633.37	
<b>Special municipal bond redemption tax: San Juan.</b>						
Municipal property tax:						
General fund.	922,334.63	1,064,273.79	1,113,560.43	1,110,983.25	1,375,496.00	
Road fund.	124,407.33	117,519.07	123,040.93	123,206.20	153,022.09	
School fund.	415,293.76	394,276.61	411,358.28	411,426.21	509,500.41	
School tax.	181,660.49	173,044.12	178,246.28	178,943.70	221,477.77	
<b>Public-improvement fund.</b>						
Construction of harbor improvements at San Juan.	200,305.06	205,848.60	1,752.31	3,787.62	100,280.00	
San Juan Harbor fund.	30,326.81	26,615.94	23,960.91	27,777.56	26,783.31	
Insular bond redemption tax.	184,554.72	175,213.04	182,591.10	182,807.94	226,403.10	
Taxes paid under protest.	84,552.50	46,176.43	41,622.58	104,813.12	248,487.45	
Irrigation fund.	782,969.65	559,669.84	664,684.21	526,182.84	429,569.07	
University fund.	1,543.39	5,754.98	8,556.76	48,611.03	53,901.14	
University agricultural fund.	50,402.62	50,261.52	50,407.54	50,088.77	50,664.70	
University income fund.		892.39	320.62	320.62	340.64	
Permanent university fund.	9.15	106.88	106.88		113.55	
Funds for insular fair.	1,514.25	946.57	75.00			
School building fund.	9,269.59	9,400.15	11,017.00	10,675.13	10,894.41	
<b>School extension in Porto Rico:</b>						
General fund.	591.35					
<b>Miscellaneous.</b>						
Sanitation fund for the suppression of epidemics.	3,424.50	2,306.80	4,513.00	2,865.50	2,338.25	
Municipal bond funds.	22,852.61	40,216.15	52,664.25	59,198.54	68,083.64	
School board bond funds.		9,367.13	10,777.38	14,675.50	25,098.13	
Industrial and commercial licenses.	203,280.30	932.36	1.25	82.60		
Redemption of municipal bonds.	34,602.08	69,955.11	63,123.24	70,130.77	76,000.00	

Redemption of school board bonds.....	399.70	26,500.00	30,500.00	30,933.33	62,066.67
Proceeds of sale of insular bonds for road construction.....	148.80				
Outstanding liabilities.....	606.66				
Cash bond deposits.....	2,444.00	1,700.82	2,078.51	7,871.70	2,533.76
Franchise deposits.....	746.63	1,082.00	1,110.00	2,005.00	4,743.69
Teachers' pension fund.....		876.00	961.71	697.38	633.18
Unclaimed wages.....					
Wharf and harbor fund.....					
Road bond funds of 1916.....					
Food commission fund.....					
Construction of rural school building.....					
Miscellaneous.....					
<b>Total receipts.....</b>	<b>9,540.51</b>	<b>6,627.22</b>	<b>10,311.92</b>	<b>41,176.99</b>	<b>60,138.87</b>
<b>Transfers.....</b>	<b>3,325,432.86</b>	<b>3,255,026.11</b>	<b>3,047,585.34</b>	<b>3,845,099.79</b>	<b>5,676,812.62</b>
	150,871.79	1,544,234.90	733,415.86	324,779.18	72,806.27
<b>Total revenues and transfers.....</b>	<b>3,476,304.65</b>	<b>4,799,261.01</b>	<b>3,780,971.20</b>	<b>4,169,878.97</b>	<b>5,749,708.89</b>
<b>Total debits.....</b>	<b>4,928,686.83</b>	<b>5,953,326.09</b>	<b>5,878,156.44</b>	<b>6,911,760.00</b>	<b>9,274,078.27</b>
<b>DISBURSEMENTS.</b>					
<b>Municipal bond redemption tax:</b>					
San Juan.....	29,346.74	37,424.64	31,473.11	67,403.49	48,327.19
Mayaguez.....	195.13	42.79	74.36	23.96	
Ponce.....	15,336.63	15,084.90	15,361.81	307.67	4.87
Arcebo.....	6,467.28	7,467.21	7,064.09	3,769.19	12.72
Guayama.....			681.77	8,060.69	6,133.11
Manabo.....			288.38	382.50	337.50
Barraquitas.....			229.29	882.79	837.71
Arroyo.....				990.00	1,168.67
<b>Special municipal bond redemption tax: San Juan</b>					<b>18,619.18</b>
<b>Municipal property tax:</b>					
General fund.....	909,152.35	1,089,082.81	1,102,695.79	1,121,847.91	1,375,499.00
Road fund.....	123,175.60	120,456.91	121,689.45	124,646.68	153,072.09
School fund.....	409,642.15	405,188.45	406,734.07	416,060.42	509,500.41
School tax.....	179,151.35	177,890.49	176,214.28	180,975.70	221,477.77
Irrigation fund.....	1,394,041.28	724,694.82	640,878.55	537,024.55	544,170.21
University fund.....	21,772.61	26,442.80	35,332.97	40,848.28	55,267.07
University income fund.....		571.77			
University agricultural fund.....	87,287.07	47,221.82	51,286.49	49,718.51	52,848.44
Permanent university fund.....	9,500.00			300.00	520.00
Funds for insular fair.....	2,416.82		575.46		
School building fund.....		636.69		18.43	
School extension.....	29,865.13				
Construction of rural school buildings.....					
Redemption certificates, indebtedness.....					
Workman's relief trust fund.....					
Escrowed inheritance fund.....					
Comerio-Cidra Road.....					
			1,025.32	11,402.82	55,513.84
			3,010.49	2,073.47	34,491.23
					476.65
					\$69,068.26
					5,109.93
					3,343.69
					500.51
					1,168.67
					9,014.19
					1,375,499.00
					153,072.09
					509,500.41
					221,477.77
					544,170.21
					55,267.07
					1,302.50
					265.74
					534.73
					20,768.99
					560.40
					10,000.00
					34,491.23
					476.65

EXHIBIT No. 28.—Statement of receipts and disbursements from July 1, 1913, to June 30, 1918, by years—Continued.

Description.	1914	1915	1916	1917	1918	Balance June 30, 1918.
DISBURSEMENTS—continued.						
Comerio-Aguas Buenas Road.....			\$3,051.45	\$193.15		
Corozal-Barros Road.....				5,570.07		
Lares-Adjuntas Road.....				7,236.98		
Chales-Juana Diaz Road.....				6,423.30	\$43,191.78	\$26,362.09
Barros-Corozal Road.....				3,404.62	38,620.96	43,297.52
Utumio-Lares Road.....				3,648.18	62,230.53	1,220.27
Mayaguez-Maricao Road.....				2,862.74	9.60	
Yaguez-Lares Road.....					23,265.15	1,805.80
Vieques Road.....					34,301.57	26,290.41
Arcecho-Lares Road.....					8,420.44	3,378.80
Yabucoa-Humacao Bridges.....					64,244.79	31,510.24
Falardo-Caiba Bridges.....					15,834.63	33,020.81
Calbo-Naguabo Bridges.....					2,044.00	2,044.00
Maricao-Indiana Road.....					14.00	1,986.00
Wharf and harbor fund.....				265.27	2,413.57	1,986.00
Food commission fund.....				200,000.00	3,831.74	2,597.43
Ponce school board debt to municipality.....			225.00		1,820,000.00	
Securities loans to Insular government.....						401,000.00
Proceeds of sale of Insular bonds for road construction.....	\$528.44	\$1,834.30	72.76			
Taxes paid under protest.....	99,928.40	71,155.45	14,764.54	69,861.30	20,311.40	318,140.04
Outstanding liabilities.....	182.25	268.36	317.43	4,776.07	3,147.04	12,515.56
Cash bond deposits.....	6,974.00	620.00	310.00	2,260.00	2,426.71	5,833.94
Franchise deposits.....	878.92	1,069.47	911.83	908.00	800.17	226.01
Insular bond redemption tax:						
Payment on principal.....	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	
Payment on interest.....	27,000.00	26,000.00	31,500.00	38,000.00	36,000.00	
Refunds.....	202,045.00	416.28	204.16	404.47	69.63	
Industrial and commercial licenses.....	35.00	2,167.66	1.25	52.50		
Sanitation fund for the suppression of epidemics.....		4,761.63	600.00	600.00	300.00	3,269.08
Suppression of trachoma.....		52,000.00	20,000.00	72,130.77	60,711.68	
Redemption of municipal bonds.....	28,718.70	40,216.15	52,664.26	59,198.56	68,063.64	90,260.00
Municipal bond funds.....	33,632.61	20,000.00	6,500.00	30,500.00	30,500.00	62,500.00
Redemption of school board bonds.....		9,367.13	10,777.38	14,675.50	25,098.13	
School board bond funds.....		2,314.39	3,860.22	3,860.22	2,389.19	2,026.48
Unclaimed wages.....	2,603.46	2,314.39	1,642.22	3,860.22	2,389.19	2,026.48
San Juan Harbor fund.....	8,240.00	16,336.00	20,325.00	20,156.80	24,000.00	90,263.78
Construction of harbor improvements at San Juan.....	87,017.98	195,063.32	135,969.87	62,592.94	21,452.19	99,897.85
Securities, refunding bonds.....						1,260,500.00
Proceeds public-improvement bonds.....		739.70				

Transfers.....	9,127.22	698,419.90	173,415.73	134,975.28	300.00	49,628.15
Miscellaneous.....		12,198.47	18,598.86	23,090.64	18,667.63	
Total.....	3,773,621.75	3,846,140.85	3,136,375.41	3,387,390.62	5,621,170.15	3,762,908.12
Balance as of June 30.....	1,154,065.08	2,097,185.24	2,741,681.03	3,524,399.38	3,752,908.12	
Total.....	4,928,686.83	5,953,326.09	5,878,156.44	6,911,790.00	9,274,078.27	

**EXHIBIT No. 29.—Estimated insular revenue cash income, appropriation assets, and appropriations for the fiscal year ending June 30, 1919.****ESTIMATED CASH INCOME AND APPROPRIATION ASSETS.****Treasurer's estimate of cash income:**

Customs.....	\$370,000.00	
Excise taxes.....	3,164,000.00	
Property taxes.....	804,000.00	
Telephone and telegraph receipts.....	94,000.00	
Proportion of municipal income for sanitation.....	119,000.00	
Court fees and fines.....	41,000.00	
Interest on loans to municipalities and school boards.....	75,000.00	
Interest on bank deposits.....	70,000.00	
Miscellaneous income.....	65,000.00	
Income taxes.....	1,190,000.00	
Inheritance taxes.....	40,000.00	
Harbor and dock fees.....	25,000.00	
<b>Total.....</b>	<b>6,057,000.00</b>	
Less reserve for income billed.....	13,047.61	
		<b>\$6,043,952.39</b>

**Appropriation assets at July 1, 1918:**

Loans to municipalities and school boards (repayable to indefinite appropriations).....	<sup>1</sup> \$164,832.85	
Less reserve for municipal loan account.....	1,000.00	
		163,832.85
Loan to irrigation service.....		<sup>2</sup> 15,000.00
Cash available for insular revenue expenditure—		
With depositaries (see Exhibit 22).....	708,540.31	
Excess of securities hypothecated.....	<sup>3</sup> 6,500.00	
		715,040.31
Bills for collection—		
Repayable to appropriations.....	4,631.28	
Income billed.....	13,047.61	
		17,678.89
		911,552.05
Estimated deficit June 30, 1919.....		418,213.16
		<b>7,373,717.60</b>

**APPROPRIATIONS.****Appropriation balances at July 1, 1918:**

Fiscal year 1918-19, appropriations for the year.....	\$5,417,489.65
Fiscal year 1917-18, unexpended balances.....	344,222.10
Fiscal year 1916-17, unexpended balances.....	122,153.37
Fiscal year 1915-16, bills for collection.....	115.00
No fiscal year—	
Unexpended balances.....	\$1,450,222.20
Bills for collection repayable.....	4,516.28
	1,454,738.48
Indefinite estimated nonreimbursable expenditures to June 30, 1919.....	35,000.00
	<b>7,373,717.60</b>

<sup>1</sup> The appropriations for these loans known as "Relief of municipalities" and "Relief of school boards," are revolving indefinite appropriations. The two amounts composing this balance are carried as debit balances in the appropriations mentioned, because no amount can be fixed for the appropriations in advance for the reason that loans of an indefinite amount are authorized by law. Instead of considering the total of loans outstanding as an asset of the appropriations that, when converted into cash, will create appropriations equal in amount to the repayments made by the municipalities and school boards, the better practice now seems to be to treat the sums of such repayments as offsets to the debits. The repayments when all loans shall have been repaid will equal the expenditures, and no appropriation warrant will be necessary to close the appropriations as is the case with nonrevolving indefinite appropriations.

<sup>2</sup> This item represents a temporary loan to the irrigation service.

<sup>3</sup> This item represents excess of bonds given as collateral security for loans contracted by the insular government. This was done in order to keep certain bonds together and avoid splitting same up in fractional parts.

# CONSOLIDATED FINANCIAL EXHIBITS.

EXHIBIT No. 30.—Expenditures for maintenance of insular roads during the fiscal year ending June 30, 1918.

Road No.	Road sections.	Lengths maintained.	Broken stone and gravel for macadam.										Ditches, shoulders, and side slopes.		Remov- ing land slides.	Cambe- ros work.
			On hand from last year.	Stone delivered July 1, 1917- June 30, 1918.			Stone placed.			Balance June 30, 1918.	Construc- tions and regrad- ing.	Cleaning.				
				C. m.	Cubic meters.	Cost.	Aver- age cost per cubic meter.	Cubic meters.	Cost.				Aver- age cost per cubic meter.			
1	San Juan-Ponce Playa.	128.5	2,166.25	18,848.25	\$39,383.40	\$2.08	18,544.00	\$16,747.42	\$0.90	2,470.50	308.59	1,872.44	176.73	8,023.00		
2	Rio-Piedras-Ponce (via Mayaguez).	250.7	1,441.25	24,884.50	42,818.94	1.72	12,554.75	10,817.60	.86	13,771.00	6,413.40	2,689.44	689.41	14,655.64		
3	Rio-Piedras-Ponce (via Fajardo).	193.3	3,705.00	29,940.00	45,749.35	1.52	27,664.25	19,801.22	.71	6,045.75	2,890.86	4,546.19	397.17	10,776.50		
4	Cayey-Guayama	36.2	435.25	7,940.00	11,030.00	2.10	406.25	135.93	.30	749.00		200.00	274.42	1,252.53		
5	Harrington-Humacao.	53.8	556.50	4,961.00	11,030.00	2.22	4,535.00	4,123.55	.90	982.50	880.66	662.47	766.94	2,323.60		
6	Ponce-Arecibo	80.9	2,583.00	10,843.50	18,126.32	1.70	8,205.75	4,812.66	.55	5,220.75	249.13	638.20	1,175.75	4,312.36		
7	Caguas-Los Piedras (via St. Lorenzo)	21.9	155.00	934.00	1,135.05	1.21	532.00	310.25	.58	557.00	187.87		34.08	814.05		
8	Aguaadilla-Adjuntas.	40.0	74.50	5,644.75	10,150.41	1.88	5,311.00	3,545.99	.64	208.25	192.03	334.01	760.28	3,038.30		
9	Bayamon-Cumero.	26.5	16.00	3,479.25	3,780.67	1.37	3,175.75	2,634.33	.82	319.50	145.12	135.77	1,714.56	1,313.97		
10	Ton-Alta-Barrios (via Corozal)	10.4	291.00	1,208.50	2,154.88	1.94	201.50	267.30	1.27	1,298.00		92.40	58.80	1,969.16		
11	Manati-Juana-Diaz (via Ciales)	20.1	406.50	1,185.00	2,234.47	1.88	1,363.25	1,047.06	.76	2,217.00	41.64	266.25	184.88	1,432.02		
12	Mayaguez-Arecibo (via Las Marias)	45.8	1,414.50	4,622.75	7,072.50	1.52	3,820.25	2,529.79	.66	2,217.00	36.87	407.43	287.40	2,081.30		
13	Consumo-Maricao.	11.6	189.50	4,601.75	7,072.50	1.82	748.75	596.82	.79	42.50		284.68	396.15	431.12		
14	Adjuntas-Albionito (via Barrios)	48.3	1.50	2,453.50	2,913.75	1.17	704.00	542.40	.77	1,751.00	8.00	641.64	452.53	2,129.30		
15	Yauco-Lares	11.6	626.50	819.00	1,018.40	1.24	1,353.50	836.59	.61	92.00	469.47	125.63	440.65	710.58		
16	Mayaguez-Las Vegas	19.8	34.75	1,325.00	2,260.00	1.72	1,323.25	1,083.80	.81	36.50	4.06	209.80	133.57	906.11		
17	Mayaguez-Cabo-Rojó	5.7	34.75	1,325.00	2,260.00	1.72	1,323.25	1,083.80	.81	36.50	4.06	209.80	133.57	906.11		
18	San German-El Boqueron (via Lajas)	40.0	1.50	428.00	1,445.11	2.50	309.00	91.08	.28	474.50	12.00	183.84	480.48	237.81		
19	La Plata Bridge-Naranjito	6.1		1,580.25	2,381.44	1.50	1,966.50	1,571.84	.79	104.00		151.44	270.76	430.48		
20	Morovis Branch.	11.6	490.25	2,083.50	2,630.21	1.50	1,966.50	1,571.84	.79	104.00		151.44	270.76	430.48		
21	Coamo-Santa Ysabel.	5.0		2,083.50	2,630.21	1.26	64.00	57.60	.90	2,032.50	192.30	348.72	45.32	452.67		
22	Las Cruces-Cidra.	8.2	13.00	1,955.00	3,467.75	1.26	64.00	57.60	.90	2,032.50	192.30	348.72	45.32	452.67		
23	Trujillo-Alto Branch	6.0	2.00	1,065.00	2,467.75	1.77	56.50	61.10	1.08	140.50		41.20	48.45	263.88		
24	Naguabo-Juncos.	12.0		1,285.50	1,964.16	1.52	884.00	728.79	.82	401.50		10.05		459.75		
25	Canovanas-Lajas.	7.0	10.50	1,174.50	3,117.50	1.81	169.50	98.98	.58	15.50		36.80		245.50		
26	Vega-Baja-Morovis.	13.5	328.50	1,068.00	1,897.50	1.79	558.00	120.55	.23	828.50		182.16	65.35	564.75		
27	Vieques Road.	5.0														
28	Ahacao-San Sebastian.	6.0	481.00				481.00	200.77	.62			12.96		212.26		
29	Martin-Pella-Bayamon.	10.6	40.50	2,843.50	6,081.90	2.13	2,751.50	3,599.57	1.30	132.50	1,460.25	21.60		1,004.39		
30	Mayaguez-La Correccion.	3.8	35.00	95.00	88.91	.62	101.25	4.68	.04	28.75		21.60		267.98		
31	Barceloneta-Florida.	10.0	66.00							66.00	500.78	62.72		209.33		
32	Cabo-Rajo-San German.	7.6	86.75	138.50	135.97	.98	208.00	30.88	.19	17.25		62.72		557.63		
33	Lajas-Grandes.	4.5									348.72			66.66		



EXHIBIT No. 30.—Expenditures for maintenance of insular roads during the fiscal year ending June 30, 1918—Continued.

Road No.	Road sections.	Equipment.			Bridges and culverts.			Retain- ing and protec- tion walls.	Road houses repairs.	Asphalt and screen- ing.	Miscella- neous.	Inspec- tions.	Total.	Gen- eral av- erage.
		Machin- ery pur- chase and repairs.	Tools purchase and repairs.	Miscel- laneous purchase and repairs.	Construc- tion.	Recon- struction.	Repairs.							
1	San Juan-Ponce Playa.	\$1,382.73	\$1,173.20	\$146.42	\$1,915.43	\$2,423.02	\$2,892.01	\$127.74	\$2,688.19	\$9,882.00	\$541.46	\$1,894.26	\$86,638.12	\$674.22
2	Rio-Piedras-Ponce (via Mayaguez).	229.59	1,181.62	25.07	15,247.92	207.05	1,004.66	448.28	38.00	3.00	423.08	4,087.25	105,859.39	385.14
3	Rio-Piedras-Ponce (via Fajardo).	243.38	1,515.00	3.73	12,678.70	327.96	2,988.70	1,838.41	25.13		462.61	2,842.48	106,859.39	548.16
4	Cayey-Guayama.				1,500.93	4.48	330.30	2.50	22.50		18.24	260.00	3,696.48	140.70
5	Barranquitas-Humacao.		59.82		93.49	27.00	390.67	17.00	30.00		22.50	1,652.50	33,027.43	149.74
6	Ponce-Arecibo.	64.67	365.14	50.85	220.74	3.26	1,065.67		30.00		116.69	923.17	3,154.99	144.04
7	Caguas-Las Piedras (via St. Lorenzo).		2.50		1,195.73		96.79		164.83		30.00	923.17	20,906.28	426.65
8	Aguadilla-Adjuntas.	10.00	47.55			3.26	35.28		10.00		164.83	340.00	11,640.93	439.28
9	Bayamon-Correo.		2.13				694.38		123.42		10.00	270.00	4,196.96	216.83
10	Toe-Alta-Barros (via Corozal).		27.13				183.42		14.00		123.42	397.50	5,787.24	192.26
11	Manati-Juana-Dias (via Chale).		7.00		150.00		1,033.04	8.00	666.26		14.00	666.26	14,303.16	312.29
12	Mayaguez-Arecibo (via Las Marias).	69.58							247.50		6.00	247.50	2,461.20	212.17
13	Consumo-Martico.								43.55		6.00	948.66		
14	Adjuntas-Albonito (via Barros).						622.71		6.00		6.00	220.50	2,212.03	190.68
15	Yauco-Lares.				1,971.69	241.36	239.20		6.00		1.50	284.67	5,890.03	297.47
16	Mayaguez-Las Vegas.				30.00		282.28		1.50		2.00	272.50	4,064.04	712.98
17	Mayaguez-Cabo-Rio.						5.00					15.00	1,166.11	292.02
18	San German-El Boqueron (via Las Lajas).				5.60	78.95	11.60					140.00	2,008.38	329.24
19	La Plata Bridge-Naranjito.	16.20					5.00		32.15			240.00	4,998.90	430.93
20	Morovis Branch.						1.35					120.17	9,344.49	1,139.57
21	Las Cruces-Cidra.	1.76	2.78		5,582.29		11.02		2.75			151.66	1,068.06	181.44
22	Trujillo-Alto Branch.		3.00		31.80	169.68	58.30		34.58			220.17	5,479.78	456.64
23	Naguabo-Juncos.				1,795.00		264.46					11.03	2,196.80	314.21
	Canoanas-Lolita.				886.93	154.62	446.99		1.50			217.50	3,068.44	227.29
	Vieques Road.				2,800.75		10.75					2,800.75	2,800.75	666.15
	Adelphi-San Sebastian.											148.25	35,093.00	111.87
	Mayaguez-La Correccional.		35.84		20,172.34	2,208.72	228.19		136.80			163.00	3,310.66	310.66
	Burceudas-Florida.								2.00			20.00	1,093.42	104.31
	Cabo-Rio-San German.						16.00		23.25			59.50	1,067.12	119.09
	Lajas-Cruces.											16.00	442.86	58.41
	Ramal Guayama.											16.00	679.00	679.00
Total.		2,017.90	3,412.71	225.95	66,308.34	5,868.58	13,038.31	2,441.93	2,795.87	9,886.00	2,264.11	18,122.43	512,630.37	435.55

General expenses:	
Office force.....	6,521.33
Field force (inspection).....	21,326.82
Equipment.....	34,515.83
Traveling expenses.....	20,005.10
Live stock.....	2,835.17
Miscellaneous.....	11,061.79
Total.....	608,898.41
	527.63

EXHIBIT No. 31.—Cost of road maintenance.

Character of work.	Averages.							Percentage of total cost.						
	1912	1913	1914	1915	1916	1917	1918	1912	1913	1914	1915	1916	1917	1918
Cable meters broken stone delivered per kilometer.....	\$64.87	\$81.23	\$93.58	\$75.12	\$65.10	\$93.90	\$106.90	36.16	32.65	47.33	36.01	35.22	34.00	34.82
Cost per cubic meter.....	1.68	1.42	1.65	1.32	1.43	1.62	1.73	20.17	18.44	23.46	24.72	22.07	18.60	12.50
Cost of placing broken stone placed per kilometer.....	68.21	52.11	97.68	77.67	74.60	84.75	85.30	11.39	11.45	8.58	9.08	10.58	8.03	9.76
Cost of inspection and overseeing per kilometer.....	34.42	40.57	30.13	24.80	27.95	34.75	51.52	8.49	7.85	3.66	3.57	3.61	6.67	7.42
Cost of machinery and tools per kilometer.....	26.60	27.81	12.94	9.81	9.52	30.50	39.14	4.98	3.48	3.07	3.81	1.65	0.95	0.80
Cost of spreading larvia per kilometer.....	377.88	523.81	137.97	299.32	163.14	165.36	257.10	12.36	8.60	9.32	12.79	14.93	18.68	16.12
Cost of cleaning per kilometer.....	37.30	30.53	32.76	35.10	39.45	85.15	85.00	5.72	5.90	4.46	5.75	7.47	5.24	2.60
Cost of repair of bridges per kilometer.....	11.25	20.91	15.72	15.79	19.76	24.05	13.72	2.73	3.96	2.22	2.55	2.99	3.89	2.18
Cost of miscellaneous per kilometer.....	8.28	8.64	6.69	6.99	7.91	17.66	11.53	2.45	7.67				0.08	4.7
Cost of live stock, carts, harness, etc., per kilometer.....	27.23	7.85			3.92	7.01	6.65			1.72	1.48	1.48	1.59	1.07
Cost of office force per kilometer.....						1.06	64.65	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of new construction per kilometer.....														
Fiscal year.	Total cost.		Cost per kilometer.		Fiscal year.		Kilometers main- tained.		Total cost.		Cost per kilometer.			
	Kilometers tained.													
1902-3.....	445.1	\$176,780	\$397.00	1910-11				974.0	\$296,943			\$304.86		
1901-4.....	518.2	163,740	374.00	1911-12				991.5	301,870			304.42		
1904-5.....	662.0	163,021	292.00	1912-13				1,060.0	332,066			313.26		
1905-6.....	690.0	137,200	201.50	1913-14				1,067.7	374,725			331.60		
1906-7.....	790.0	246,574	301.60	1914-15				1,107.2	289,899			261.01		
1907-8.....	813.0	246,867	303.00	1915-16				1,126.9	247,411			264.19		
1908-9.....	900.6	296,852	331.84	1916-17				1,126.3	516,581			453.81		
1909-10.....	971.6	276,152	286.46	1917-18				1,154.0	608,896			527.63		

EXHIBIT No. 32.—Collections at the several ports of the island during the fiscal year 1917-18.

Month.	Aguadilla.	Arecibo.	Arroyo.	Fajardo.	Guanica.	Guayanilla.	Humacao.	Mayaguez.	Ponce.	San Juan.	Total.
1917.											
July.....	\$110.80	\$143.85	\$100.59	\$201.68	\$200.89	\$61.25	\$156.05	\$483.75	\$600.80	\$2,230.89	\$4,420.16
August.....	154.23	92.46	102.04	117.70	208.76	17.08	64.73	237.09	818.18	2,200.79	4,013.66
September.....	89.06	19.30	46.61	39.26	235.75	17.08	100.15	264.59	566.96	1,608.80	2,967.56
October.....	141.13	19.57	233.50	41.62	199.69	.....	8.54	271.81	775.26	1,776.44	3,457.56
November.....	120.41	16.48	49.67	62.83	134.39	.....	81.99	223.32	594.59	1,983.15	3,266.73
December.....	79.66	61.06	84.31	75.01	906.46	67.50	93.50	199.70	654.98	2,158.48	4,380.66
1918.											
January.....	184.27	97.49	46.92	285.18	1,047.22	9.14	115.29	647.00	676.14	1,983.63	5,052.28
February.....	54.57	8.32	90.35	42.79	741.05	.....	91.66	202.22	854.43	1,895.72	3,961.11
March.....	60.25	.....	32.56	82.72	1,069.67	38.21	104.17	254.15	638.36	1,967.86	4,242.95
April.....	48.92	22.69	119.69	48.42	657.22	.....	74.61	244.34	1,038.88	2,390.27	4,645.04
May.....	85.11	9.26	127.51	100.09	719.39	8.54	134.46	199.75	747.39	2,584.76	4,706.26
June.....	49.39	14.44	95.42	83.17	1,027.85	6.68	72.16	167.40	467.18	1,043.36	3,026.95
Total.....	1,177.80	504.92	1,196.07	1,160.47	7,138.34	220.96	1,097.92	3,385.12	8,463.15	23,804.15	46,180.92

EXHIBIT No. 33.—*Total cash receipts and expenditures, insular telegraph, for the year ended June 30, 1918.*

TELEGRAPH.

Month.	Number of paid messages.	Earnings.	Maintenance and operation.	Profits.	Losses.
July.....	14,890	\$5,881.12	\$82.50	\$5,798.62	.....
August.....	14,177	4,731.15	5,090.77	.....	\$899.62
September.....	16,062	4,637.43	3,365.62	1,271.81	.....
October.....	14,916	4,790.74	8,281.01	.....	\$3,510.27
November.....	12,796	4,459.82	4,678.96	.....	219.14
December.....	12,775	4,545.54	8,270.89	.....	\$3,725.35
January.....	15,544	5,064.91	1,273.68	3,791.23	.....
February.....	14,550	5,059.29	6,543.73	.....	1,484.44
March.....	12,854	4,400.54	4,141.66	268.88	.....
April.....	14,161	4,569.15	6,421.15	.....	1,852.00
May.....	15,181	4,876.08	4,483.08	393.00	.....
June.....	16,183	7,124.02	8,922.80	.....	1,798.78
Total.....	176,089	60,069.74	62,105.80	11,513.54	13,590.90

TELEPHONE.

Month.	Number of paid messages.	Tolls.	Rentals.	Total.	Maintenance and operation.	Profits.	Losses.
July.....	6,146	\$2,150.96	\$700.24	\$2,851.20	\$41.24	\$2,809.96	.....
August.....	7,563	2,475.28	721.88	3,197.11	2,845.88	351.73	.....
September.....	6,552	2,445.12	737.63	3,182.75	1,682.81	1,499.94	.....
October.....	7,419	2,290.75	751.53	3,042.28	4,115.50	.....	\$1,073.22
November.....	6,965	2,329.67	772.38	3,102.05	2,539.48	762.57	.....
December.....	6,458	2,187.06	760.88	2,947.93	4,135.44	.....	1,187.51
January.....	7,085	2,564.99	775.38	3,339.37	339.53	2,999.84	.....
February.....	6,227	2,175.98	788.38	2,964.36	3,371.86	.....	307.50
March.....	6,645	2,198.84	808.88	3,007.72	2,020.53	987.19	.....
April.....	6,758	2,189.59	808.88	2,998.47	3,210.57	.....	217.10
May.....	7,148	2,224.79	810.02	3,034.81	2,241.51	793.30	.....
June.....	7,944	2,303.61	813.58	3,117.19	4,483.40	.....	1,366.21
Total.....	82,915	27,526.58	9,239.66	36,766.24	31,024.35	9,893.43	4,151.54

COMBINED.

Month.	Number of free messages.	Total number of messages.	Earnings.	Maintenance and operation.	Profits.	Losses.	Deficit and surplus.
July.....	1,060	22,086	\$8,732.32	\$123.74	\$8,608.58	.....	\$8,608.58
August.....	618	22,358	7,918.26	8,536.15	.....	\$617.89	617.89
September.....	585	28,199	7,820.18	5,048.43	2,771.75	.....	2,771.75
October.....	439	22,774	7,763.02	12,346.51	.....	4,583.49	4,583.49
November.....	1,410	21,171	7,561.87	7,018.44	543.43	.....	543.43
December.....	692	20,925	7,498.47	12,406.39	.....	4,912.96	4,912.96
January.....	1,128	28,767	8,395.28	1,910.51	6,484.77	.....	6,484.77
February.....	655	21,432	8,023.65	9,815.59	.....	1,791.94	1,791.94
March.....	906	21,406	7,403.26	6,161.99	1,241.27	.....	1,241.27
April.....	985	21,899	7,562.62	9,631.72	.....	2,069.10	2,069.10
May.....	941	23,270	7,910.84	6,724.54	1,186.30	.....	1,186.30
June.....	1,247	25,374	10,241.21	13,406.20	.....	3,164.99	3,164.99
Total.....	10,656	269,660	96,825.98	93,130.15	20,836.10	17,140.27	3,695.83

EXHIBIT No. 34.—Statement by stations showing receipts and operating expenses, Bureau of insular telegraph, for the year ending June 30, 1918.

Stations.	Line receipts.			Expenditures.					Total.	Profits.	Losses.
	Cash.	Value of half-rate.	Value of free.	Total.	Salaries.	Rent.	Light.	Stationery, traveling expenses, postage, etc.			
Adjuntas.....	\$855.32	\$14.93	\$19.26	\$890.51	\$600.00		\$2.25	\$86.68	\$901.93	\$197.58	
Aguada.....	41.31		62.56	1,296.60	870.00	\$120.00	9.20	42.64	42.64	20.02	
Aguadilla.....	1,298.84	29.32	27.44	1,355.60	360.00		3.80	281.43	1,280.63	15.97	
Agua Buenas.....	801.10	49.18	9.60	1,850.28	857.34	120.00	12.15	59.92	1,233.22	427.06	
Albionito.....	1,891.01	9.60	11.97	1,912.58	589.33		12.25	181.52	1,151.01	761.57	
Alaseo.....	251.00	10.17	25.56	286.73	1,313.17	180.00	19.20	66.50	1,668.08		\$381.35
Arecibo.....	1,724.00	48.98	90.41	1,863.39	1,464.67	72.00	13.24	257.49	1,769.98	93.43	
Arroyo.....	450.09	4.86	4.11	459.06	448.00			76.73	626.64		167.58
Barceloneta.....	207.07	1.50	20.46	229.03	480.00	72.00	5.80	56.15	507.15		275.12
Barraquitas.....	645.70	3.99	22.95	672.64	480.00	60.00	12.00	55.34	613.14	59.50	
Barros.....	567.46	10.23	13.15	590.84	534.50	60.00	11.25	45.20	600.20		9.36
Bayamon.....	501.34	32.40	48.36	582.10	573.33		8.65	101.63	657.21		75.11
Cabo Rojo.....	275.13	6.19	27.06	308.38	2,551.68	309.00	67.90	565.79	3,494.37	6,601.59	
Caguas.....	9,991.90	100.36	3.70	10,095.96	2,944.67	57.20	3.25	84.37	3,991.94		166.05
Camuy.....	205.35		20.44	225.79	480.00			33.57	516.83		332.21
Carolina.....	172.03	5.78	6.80	184.61				59.72	184.61	14.37	
Cataño.....	74.09			74.09				18.00	74.09	4,163.12	
Cayey.....	5,877.02	7.18	180.62	6,064.82	1,894.83	120.00	18.00	335.87	8,071.70		735.94
Cayey.....	114.20	23	40.09	154.52	716.99	98.00	2.80	74.67	870.46		274.89
Cidra.....	281.34	1.42	1.66	283.46	490.00	13.50	2.50	62.35	553.35		
Cidra.....	676.03	5.81	11.66	693.50	345.33		15.10	55.66	418.09	277.41	
Coamo.....	419.28	4.50	32.41	456.19	600.00	60.00	8.30	40.20	708.50		252.31
Comerio.....	851.85			851.85	300.00	60.00	6.00	53.88	479.88	371.97	
Corozal.....	682.55		8.41	690.96	200.00	60.00	7.40	40.24	307.64	383.32	
Dorado.....	60.20	2.46		62.66				39.70	39.70	10.50	
Fajardo.....	673.42	14.41	31.94	719.77	379.32	35.00	11.45	61.40	475.72	200.16	
Fajardo.....	937.02	56.53	18.13	1,001.67	840.00	96.00	12.15	228.27	1,016.44	345.88	
Guayama.....	1,403.62	1.93	3.93	1,409.48	795.00			75.92	1,332.42	71.87	
Guayanilla.....	241.72		18.59	260.31	200.89	60.00	8.30	145.45	365.14		139.87
Guaynabo.....	1,071.85	.52	2.90	1,075.27	720.00		21.12	150.42	870.54	203.72	
Hatillo.....	114.12		1.77	115.89				55.92	115.89	71.10	
Hermosillo.....	34.37		5.83	40.20				35.83	40.20	7	
Humacao.....	876.50	82.61	22.82	981.93	802.34		19.96	721.13	894.42	7	
Isabela.....	326.33	8.09	3.63	338.05	480.00			46.53	544.53		212.11
Jayuya.....	538.24	8.55	23.63	570.42	356.67		5.50	45.39	407.56	162.86	
Juana Diaz.....	238.41	5.18	18.56	262.15	476.98		9.60	36.78	523.37		261.22
Manaca Irupe.....	2,119.44	7.30	51.18	2,177.92	1,027.78	58.17	16.95	155.73	1,238.63	919.29	
Lajas.....	60.81	.34	21.56	91.71				50.11	50.11	41.60	

Lares.....	448.45	8.28	18.20	474.93	600.00	94.00	16.00	71.33	783.33	204.40
Las Marias.....	238.64	9.38	3.68	251.70	320.00	.....	56.20	33.81	358.01	107.31
Las Piedras.....	283.19	8.07	.....	286.26	200.00	55.00	.....	40.64	265.64	9.38
Lolita.....	55.29	.....	8.84	56.13	.....	.....	.....	43.68	43.68	.....
Luquillo.....	31.74	2.74	17.85	67.90	.....	108.00	.....	36.91	37.99	.....
Manati.....	499.93	.....	.....	520.52	544.00	.....	7.20	70.26	728.46	208.94
Maricao.....	227.72	.....	38.27	192.91	238.41	.....	3.00	35.81	368.81	130.40
Mayaguez.....	154.64	73.26	55.34	192.91	480.00	48.00	11.40	57.07	598.47	403.56
Moca.....	3,383.59	24.24	20.22	3,487.19	2,337.17	180.00	65.20	291.05	3,473.42	.....
Morovis.....	327.36	2.91	114.80	333.13	200.00	.....	7.84	38.14	365.98	119.15
Naguabo.....	297.75	8.60	77.67	375.02	598.67	48.00	.....	38.08	694.75	32.86
Naranjito.....	170.32	.....	170.57	337.39	480.00	.....	4.65	46.93	371.58	201.01
Patillas.....	284.25	.....	53.14	337.39	480.00	.....	10.50	60.84	551.34	213.96
Pedulas.....	6,709.44	92.35	162.02	6,963.81	4,794.56	240.00	72.08	551.42	5,668.06	.....
Ponce.....	111.04	.....	19.37	130.75	.....	.....	.....	101.34	101.34	.....
Quebradillas.....	161.62	14.48	27.00	188.62	479.67	.....	4.80	58.50	64.30	.....
Rio Grande.....	666.67	10.73	17.05	683.40	578.33	144.00	.....	56.57	732.52	813.11
Sabana Grande.....	154.37	.....	8.85	163.22	.....	.....	4.82	74.53	74.53	188.07
San German.....	405.54	5.64	16.01	421.55	477.17	.....	16.43	106.27	602.87	339.10
San Juan.....	25,774.15	6,731.65	6,960.91	38,466.71	12,468.79	96.00	389.67	2,068.68	15,238.05	241.80
San Lorenzo.....	408.96	7.15	24.33	433.44	480.00	60.00	6.00	68.78	614.78	.....
San Sebastian.....	188.66	7.86	20.68	209.11	628.67	.....	2.20	41.48	670.35	232.86
Santa Isabel.....	71.96	.....	15.45	87.01	243.67	36.00	10.47	104.36	368.50	191.39
Toca Alta.....	75.56	.....	15.05	90.61	.....	.....	.....	57.51	57.51	.....
Toca Baja.....	18.86	.....	.....	18.86	.....	.....	.....	52.86	52.86	.....
Trujillo Alto.....	1,115.60	20.86	29.62	1,145.46	600.00	96.00	19.20	107.11	823.71	10.60
Utua.....	24.57	.....	10.74	35.29	.....	.....	.....	29.46	29.46	.....
Vega Alta.....	337.00	8.44	23.47	360.47	600.00	60.00	6.35	73.70	738.07	444.69
Vega Baja.....	537.80	7.40	94.16	631.96	720.00	48.00	7.70	87.39	783.09	.....
Vieques.....	538.80	7.43	24.66	563.46	598.67	96.00	12.20	86.03	702.92	224.00
Yauco.....	960.00	9.48	64.11	1,024.59	1,013.00	121.00	27.60	131.33	1,262.93	229.24
General office.....	.....	.....	.....	1,063.59	8,040.00	.....	.....	10,634.51	10,634.51	.....
Relief operators.....	.....	.....	.....	.....	1,743.00	.....	.....	1,743.00	1,743.00	.....
Stores.....	11,282.97	.....	.....	11,282.97	.....	.....	.....	227.01	11,282.97	227.01
Porto Rico Telephone Co.....	1,623.34	.....	.....	1,623.34	.....	33.35	.....	.....	1,589.99	.....
Miscellaneous.....	96,825.98	7,577.63	8,769.35	113,172.96	62,394.20	3,856.22	1,092.22	11,807.84	78,880.48	20,778.38
Total.....	96,825.98	7,577.63	8,769.35	113,172.96	62,394.20	3,856.22	1,092.22	11,807.84	78,880.48	20,778.38
Poles, line wire, insulation, instruments, miscellaneous, etc.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$14,249.67
Salaries, rent, light, stationery, traveling expenses, etc.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78,880.48
Reconstruction and extension.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,292.57
Total expenditures.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	99,422.72
Total earnings.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	113,172.96
Difference.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,750.24

EXHIBIT No. 35.—*Porto Rico Irrigation Service, financial statement, June 30, 1918.*

<b>Investment accounts:</b>		
Construction expenditures.....		\$4,120,480.66
Construction equipment.....	\$82,707.11	
Less depreciation charged, off.....	52,663.13	
	30,043.98	
Supplies construction.....	42,692.64	
Total value equipment and supplies on hand.....		72,736.62
		4,206,226.28
Less items in suspense.....		488.11
Total expenditures on construction to date.....		4,205,738.17
Interest payable on temporary loan, Insular government.....		3,275.00
Interest on bonds to June 30, 1918.....		1,507,155.56
Discount on bonds.....		46,100.50
<b>Operation:</b>		
During construction, eastern division.....	5,886.28	
During construction, western division.....	9,939.28	
		15,825.66
<b>Plant:</b>		
Irrigation system, Guamaní Canal.....	1,129.72	
Irrigation system, Juana Díaz Canal.....	1,345.06	
Hydroelectric system, power plant.....	354.90	
Hydroelectric system, distribution lines.....	14,399.16	
General headquarters, Guayama office.....	212.88	
General headquarters, telephone lines.....	7.30	
General headquarters, corral.....	255.61	
General headquarters, garage.....	496.63	
General headquarters, construction division.....	3.76	
		18,235.01
<b>Maintenance repairs:</b>		
Irrigation system, Patillas Reservoir.....	1,330.11	
Irrigation system, Carite Dam.....	2,569.62	
Irrigation system, Melania Reservoir.....	65.58	
Irrigation system, Guamaní Canal.....	9,271.60	
Irrigation system, Carite Tunnel.....	11.20	
Irrigation system, Patillas Canal.....	25,380.57	
Irrigation system, Coamo Reservoir.....	1,109.21	
Irrigation system, Toro Negro Diversion.....	18.62	
Irrigation system, Guayabal Reservoir.....	1,262.40	
Irrigation system, Juana Díaz Canal.....	15,325.53	
Hydroelectric system, power plant.....	4,325.11	
Hydroelectric system, substation.....	193.44	
Hydroelectric system, transmission lines.....	509.58	
Hydroelectric system, distribution lines.....	475.49	
General headquarters, Guayama office.....	94.95	
General headquarters, Juana Díaz office.....	271.89	
		63,273.88
<b>Maintenance improvements:</b>		
Irrigation system, Patillas Dam.....	1,153.80	
Irrigation system, Guamaní Canal.....	10,472.81	
Irrigation system, Patillas Canal.....	7,160.23	
Irrigation system, Coamo Reservoir.....	675.79	
Irrigation system, Guayabal Reservoir.....	93.81	
Irrigation system, Juana Díaz Canal.....	4,196.06	
Hydroelectric system, power plant.....	85.87	
Hydroelectric system, transmission lines.....	117.85	
Hydroelectric system, distribution lines.....	87.25	
General headquarters, Guayama office.....	112.62	
General headquarters, Juana Díaz office.....	866.69	
		26,022.83
<b>Operation:</b>		
Irrigation system, western division.....	32,732.94	
Irrigation system, eastern division.....	66,398.76	
		99,131.70
<b>Operation:</b>		
Hydroelectric system, power plant.....	27,204.11	
Hydroelectric system, substations.....	5,866.08	
Hydroelectric system, transmission lines.....	2,365.25	
Hydroelectric system, distribution lines.....	2,200.69	
		37,636.13
<b>Operation:</b>		
General headquarters.....	37,401.63	
Administration.....	108,310.43	
Stores.....	10,227.09	
Total expenditures.....		\$6,172,333.59

EXHIBIT No. 35.—*Porto Rico Irrigation Service, financial statement, June 30, 1918*—Continued.

Working accounts:

Cash in hand of treasurer, San Juan.....	\$20,289.43	
Disbursing office, Guayama, accounts collectible.....	10,412.76	
Tax levy.....	\$307,608.75	
Less taxes collected.....	307,594.70	
	14.05	\$30,716.24
Less—		
Vouchers payable.....	2,941.16	
Unpaid labor.....	104.73	
Accrued expenses.....	129.33	
		3,175.22
For expenditures—		
Construction fund.....	3,576.45	
Operation and maintenance fund.....	20,713.63	
Development and extension of water-power fund.....	3,250.94	
		\$27,541.02
		<u>6,199,874.61</u>

LIABILITIES.

Investment accounts:

Bond issue, series of 1909.....	\$3,000,000.00	
Bond issue, series of 1913.....	1,000,000.00	
Bond issue, series of 1914.....	1,000,000.00	
Bond issue, series of 1915.....	400,000.00	
Bond issue, series of 1916.....	200,000.00	
	5,700,000.00	
Bonds paid, Jan. 1, 1914.....	150,000.00	
Bonds paid, Jan. 1, 1915.....	150,000.00	
Bonds paid, Jan. 1, 1916.....	150,000.00	
Bonds paid, Jan. 1, 1917.....	150,000.00	
Bonds paid, Jan. 1, 1918.....	150,000.00	
	750,000.00	4,950,000.00
Premium on bonds.....	17,865.46	
Interest on bank balances.....	228,972.94	
Receipts during construction, eastern division.....	55,887.75	
Receipts during construction, western division.....	34,662.20	
Irrigation revenues.....	798,206.70	
Miscellaneous, irrigation revenues.....	2,478.75	
Hydroelectric current revenue.....	97,338.77	
Miscellaneous, hydroelectric revenue.....	1,546.84	
Donation by Manuel González y Martínez.....	2,821.20	
Treasury funds advanced.....	15,000.00	
		<u>1,249,874.61</u>
		6,199,874.61

EXHIBIT No. 36.—*General balance sheet—Summary of accounts to June 30, 1918.*

	Debits.	Credits.
Patillas Dam.....	\$1,125,351.91	
Patillas Canal.....	385,769.19	
Patillas lateral canals and outlets.....	27,655.48	
Carite Dam.....	271,854.80	
Carite Tunnel.....	66,853.19	
Carite water power.....	326,461.62	
Guanani Canal.....	112,232.32	
Toro Negro diversion.....	130,442.28	
Guayabal Dam.....	642,139.65	
Juana Diaz lateral canal and outlets.....	39,980.08	
General administration.....	337,471.74	
Juana Diaz Canal.....	325,596.22	
Melania Reservoir.....	43,279.17	
Hydrographic division.....	74,305.49	
Coamo Dam.....	296,394.94	
Premium on bonds.....		\$8,559.50
Interest on bonds.....	901,777.78	
Interest on bank balances.....		219,484.78
Treasurer, San Juan, Porto Rico.....	3,399.00	
Vouchers payable.....		100.46
Treasurer accounts collectible.....	277.91	
Operation during construction, eastern division.....	5,886.38	
Operation during construction, western division.....	9,939.28	
Receipts during construction, eastern division.....		55,887.75
Receipts during construction, western division.....		34,662.20
Discount on bonds.....	38,612.50	
Interest payable on temporary loan, insular government.....	955.55	



## EXHIBIT No. 36.—General balance sheet—Summary of accounts to June 30, 1918—Con.

	Debits.	Credits.
Irrigation system, Guamaní Canal.....	\$1,129.72	
Irrigation system, Juana Díaz Canal.....	1,345.06	
Hydroelectric system, power plant.....	854.90	
Hydroelectric system, distribution lines.....	14,399.16	
General headquarters, Guayama office.....	212.88	
General headquarters, telephone lines.....	7.30	
General headquarters, corral.....	285.61	
General headquarters, garage.....	496.63	
General headquarters, construction division.....	3.75	
Maintenance repairs, Patillas Reservoir.....	1,330.11	
Maintenance repairs, Carite Dam.....	3,595.62	
Maintenance repairs, Melania Reservoir.....	65.58	
Maintenance repairs, Guamaní Canal.....	9,271.60	
Maintenance repairs, Carite Tunnel.....	11.20	
Maintenance repairs, Patillas Canal.....	25,380.57	
Maintenance repairs, Coamo Reservoir.....	1,109.21	
Maintenance repairs, Toro Negro diversion.....	18.62	
Maintenance repairs, Guayabal Reservoir.....	1,292.40	
Maintenance repairs, Juana Díaz Canal.....	15,325.53	
Hydroelectric system, power plant.....	4,325.11	
Hydroelectric system, substations.....	193.44	
Hydroelectric system, transmission lines.....	509.56	
Hydroelectric system, distribution lines.....	475.49	
General headquarters, Guayama office.....	94.95	
General headquarters, Juana Díaz office.....	271.89	
Maintenance improvements, Patillas Dam.....	1,153.80	
Maintenance improvements, Guamaní Canal.....	10,472.81	
Maintenance improvements, Patillas Canal.....	7,160.28	
Maintenance improvements, Coamo Reservoir.....	675.79	
Maintenance improvements, Guayabal Reservoir.....	93.81	
Hydroelectric system, power plant.....	85.87	
Hydroelectric system, transmission lines.....	117.85	
Hydroelectric system, distribution lines.....	87.25	
Maintenance improvements, Juana Díaz Canal.....	4,196.06	
General headquarters, Guayama office.....	112.62	
General headquarters, Juana Díaz office.....	866.00	
Irrigation system, eastern division.....	66,399.76	
Irrigation system, western division.....	32,732.94	
Hydroelectric system, power plant.....	27,204.11	
Hydroelectric system, substations.....	5,866.08	
Hydroelectric system, transmission lines.....	2,365.25	
Hydroelectric system, distribution lines.....	2,200.60	
General headquarters, telephone lines.....	5,085.40	
General headquarters, corral.....	4,782.63	
General headquarters, garage.....	1,503.76	
General headquarters, construction division.....	26,029.84	
Administration, executive division.....	72,964.81	
Administration, engineering division.....	18,076.16	
Administration, accounting division.....	8,731.08	
Administration, property division.....	3,518.38	
Tax levy.....	14.05	
Treasury.....	13,070.99	
Treasury, development and extension of water power.....	3,819.44	
Accounts receivable.....	10,134.85	
Stores.....	7,934.36	
Stores, Carite water power.....	2,292.73	
Accounts payable.....		\$2,840.70
Unpaid labor.....		104.73
Accrued expenses.....		129.33
Bonded debt.....		4,950,000.00
Treasury funds advanced.....		15,000.00
Irrigation revenues.....		793,206.70
Miscellaneous irrigation revenues.....		2,478.73
Hydroelectric current revenues.....		97,533.77
Miscellaneous hydroelectric revenues.....		1,545.84
Donation by Manuel Gonzalez y Martinez.....		2,821.20
Interest on bonds.....	605,377.78	
Other interests.....	2,319.45	
Discount on bonds.....	7,488.00	
Premium on bonds.....		9,405.96
Interest on daily bank balances.....		9,483.16
<b>Total.....</b>	<b>6,203,049.83</b>	<b>6,203,049.83</b>

EXHIBIT No. 37.—Statement of net charges of features during fiscal year July 1, 1917–June 30, 1918.

Features.	Total to June 30, 1917.	Total, July 1, 1917, to June 30, 1918.	Total to June 30, 1917.
Patillas Dam.....	\$1,128,661.23	\$3,309.32	\$1,125,351.91
Patillas Canal.....	386,174.89	1,405.70	385,769.19
Patillas lateral canals and outlets.....	27,655.48		27,655.48
Carite Dam.....	272,481.90	1,027.01	271,854.89
Carite Tunnel.....	66,853.19		66,853.19
Carite water power.....	321,973.87	4,487.75	326,461.62
Guamani Canal.....	111,807.16	425.16	112,232.32
Toro Negro diversion.....	130,068.44	353.84	130,442.28
Guayabal Dam.....	642,606.31	1,466.66	642,139.65
Juana Diaz lateral canals.....	39,930.08		39,930.08
General administration.....	334,648.18	2,823.56	337,471.74
Juana Diaz Canal.....	325,219.70	376.52	325,596.22
Melania Reservoir.....	43,279.17		43,279.17
Hydrographic division.....	74,305.49		74,305.49
Coamo Dam.....	298,547.04	1,152.10	296,394.94
Irrigation system, Guamani Canal.....	1,129.72		1,129.72
Irrigation system, Juana Diaz Canal.....	1,345.06		1,345.06
Hydroelectric system, power plant.....		354.90	354.90
Hydroelectric system, dist. lines.....		14,399.18	14,399.18
General headquarters, Guayama office.....		212.88	212.88
General headquarters, telephone lines.....		7.30	7.30
General headquarters, corral.....		285.61	285.61
General headquarters, garage.....		496.63	496.63
General headquarters, construction division.....		3.75	3.75
Maintenance repairs, Patillas Reservoir.....	1,330.11		1,330.11
Carite Dam.....	3,598.02		3,598.02
Melania Reservoir.....	65.58		65.58
Guamani Canal.....	6,895.11	2,376.49	9,271.60
Carite Tunnel.....	11.20		11.20
Patillas Canal.....	17,608.14	7,772.43	25,380.57
Coamo Reservoir.....	1,109.21		1,109.21
Guayabal Reservoir.....	12.00	1,280.40	1,292.40
Toro Negro diversion.....		18.02	18.02
Juana Diaz Canal.....	10,076.81	5,248.72	15,325.53
Hydroelectric system power plant.....	2,076.15	2,248.96	4,325.11
Hydroelectric system substation.....		193.44	193.44
Hydroelectric system transmission lines.....		509.56	509.56
Hydroelectric system district lines.....		475.49	475.49
General headquarters, Guayama office.....	82.10	12.85	94.95
General headquarters, Juana Diaz office.....		271.89	271.89
Maintenance improvements:			
Patillas Dam.....	572.74	581.06	1,153.80
Guamani Canal.....	10,417.06	55.75	10,472.81
Patillas Canal.....	5,682.23	1,478.05	7,160.28
Coamo Reservoir.....	675.79		675.79
Guayabal Reservoir.....	93.81		93.81
Juana Diaz Reservoir.....	1,826.30	2,369.76	4,196.06
Hydroelectric system power plant.....	39.00	46.87	85.87
Hydroelectric system transmission lines.....		117.85	117.85
Hydroelectric system district lines.....		87.25	87.25
General headquarters, Guayama office.....	115.12	12.50	127.62
General headquarters, Juana Diaz office.....	63.05	803.64	866.69
General headquarters, corral.....	167.41	1,167.41	
General headquarters, garage.....	558.10	1,558.10	
Operation, eastern division.....	50,360.82	16,837.94	66,398.76
Operation, western division.....	24,336.70	8,396.24	32,732.94
Hydroelectric system power plant.....	14,886.35	12,317.76	27,204.11
Hydroelectric system substations.....	3,386.01	2,480.07	5,866.08
Hydroelectric system transmission lines.....	1,354.04	1,011.21	2,365.25
Hydroelectric system district lines.....	1,227.68	973.01	2,200.69
General headquarters, telephone lines.....	3,838.30	1,247.10	5,085.40
General headquarters, corral.....	2,328.44	2,454.19	4,782.63
General headquarters, garage.....	1,294.68	209.08	1,503.76
General headquarters, construction division.....	18,078.52	7,951.32	26,029.84
Administration, executive division.....	61,062.42	11,922.39	72,984.81
Administration, engineering division.....	15,419.84	2,656.32	18,076.16
Administration, accounting division.....	7,856.78	874.30	8,731.08
Administration, property division.....	2,624.78	893.60	3,518.38
Total.....	4,477,837.91	111,911.87	4,589,449.78

1 Credit balances.



## APPENDIX V.

### REPORT OF THE TREASURER.

DEPARTMENT OF FINANCE,  
OFFICE OF THE TREASURER,  
*San Juan. P. R., August 20, 1918.*

THE GOVERNOR OF PORTO RICO,  
*San Juan, Porto Rico.*

SIR: In compliance with your request of July 9, 1918, I have the honor to submit the following report for the fiscal year ended June 30, 1918.

#### INTRODUCTORY REMARKS.

##### REORGANIZATION OF PERSONNEL.

The period of time covered by this report is precisely the first fiscal year expired since the establishment of the new organic act for Porto Rico, approved by the Congress of the United States on March 2, 1917. In accordance with the provisions of this act the honorable Governor of Porto Rico submitted to the insular senate for approval, at its first session, the appointment of the present treasurer of Porto Rico, who, after complying with all the requirements of law, entered upon the duties of his office on September 6, 1917.

Conditions in the department of finance at that time, as regards personnel, were highly abnormal, nearly all the chiefs of bureaus being absent, as well as many other employees holding positions of responsibility, all these being persons who, because of their long experience in the department, were perfectly familiar with its interior organization, the taxing system, the laws governing the assessment and collection of property and excise taxes, the financial situation of the island, and with many other details, an experience which can only be gained after long years of service in these offices.

The untimely death of the chief of the bureau of municipal finance, the appointment of the paymaster and chief of the bureau of accounts to the position of assistant auditor of Porto Rico, the separation of the chief of the bureau of property taxes to accept a commission in the United States Army, the resignation of the chief of the bureau of internal revenue to accept a position in the United States; the vacancies which occurred in the positions of assessor and investigator of corporations and internal revenue agent at large, their former incumbents having joined the United States military reserve forces; the vacancies in the positions of income tax inspector, examiner of collectors' offices and assessor at large, and in the four positions of assistant chiefs of bureaus, and other positions of lesser importance, placed these offices in the hands of employees of minor category.

Such were the conditions prevailing in the department on September 6, 1917, when, as stated above, the present treasurer took charge of his office, and these were worsened a little later with the resignation of the assistant treasurer, who, after 18 years of valuable service in the department, left here to accept a more advantageous position, from a financial standpoint, with a banking institution of Peru.

The first and most important duty of the treasurer was to fill the vacant positions then existing, and this required a great deal of care. To find other persons who could immediately come up to the standard of efficiency attained by the former incumbents after their long years in the service, was well nigh impossible, but a selection was made of those persons who could promptly understand the new work and thus cooperate toward the success of the office, and the results have been excellent. The duty of selecting this personnel was performed as rapidly as was consistent with the importance of the task, and at present all vacancies are filled and the work is running smoothly and in absolutely normal conditions.

Many positions of lesser importance were vacated in the department by reason of the military draft, and it has been the policy of the department of finance, with very few exceptions, to fill the higher positions by promotion of employees in lower grades, many promotions having thus been made.

Some of the vacant positions which have been most difficult to fill, because of their special nature, have been those of collectors of internal revenue, since the collectors must understand thoroughly the interior system of the department of finance for handling properly the government's interests in such offices and must be persons of highly moral character and undoubted honesty. They must be absolutely experienced men in this kind of work and of proven capacity and integrity, and it is very difficult, if not impossible, to select them from a civil service list of eligibles. I have in mind a plan to make selection, from a list of eligibles of the first and second grades to be furnished by the civil service commission, of young men who might be willing to accept temporary appointments at reduced rates of compensation, and keep them for some time under preparation in the office of the collector at San Juan, in order to enable the department to become acquainted with their character and inclinations and thus make available a force of efficiently trained men to assume at any moment the responsibility of future vacant positions in this important branch of the department of finance.

#### BUREAU OF ACCOUNTS AND OF THE PAYMASTER.

#### FINANCIAL CONDITION OF THE INSULAR TREASURY AT THE CLOSE OF THE FISCAL YEAR 1917-18.

It is a matter of satisfaction to be able to state that at the close of business on June 30, 1918, there was an available cash balance of insular revenues, in the insular treasury, of \$708,540.31, as shown in Exhibit No. 20. This has been made possible by the approval of new laws providing for additional revenues, which were made necessary in view of the considerable decrease in the income of the insular treasury which was expected at the close of the fiscal year, due to prohibition, which went into effect on March 2, 1918. In the execution of these new laws the department has had to display unusual activity.

In addition to the available surplus of \$708,540.31, above mentioned, we are now expecting to receive the amount of \$200,000 from taxes collected in the United States on articles produced in Porto Rico and transported to the United States, and these amounts, added to the proportional part and excess resulting from the sum of \$210,831.52 of taxes paid under protest, or approximately \$100,000 corresponding to the insular government, plus the sum of \$137,299.53 due by the municipalities; \$26,533.32 due by the school boards; the sum of \$17,678.89 from lease of public lands and other sources, and the sum of \$15,000 to be repaid the insular government by the irrigation service on account of loan contracted during the fiscal year 1917-18, make up a total of \$1,205,052.05 of available revenues and revenues in transit at the close of the fiscal year.

*Trust funds.*—In addition to the available cash balance of \$708,540.31 of insular revenues, there is a balance of \$3,752,908.12 of trust funds, thus making a total of \$4,461,448.43 in the insular treasury, distributed as follows:

<b>Insular revenues:</b>		
Cash .....	\$625,540.31	
Bonds unpledged .....	83,000.00	\$708,540.31
<b>Trust funds:</b>		
Cash .....	2,091,408.12	
Bonds pledged .....	1,661,500.00	3,752,908.12
<b>Total</b> .....		<b>4,461,448.43</b>
The amount of \$1,661,500, bonds pledged, is made up of—		
Deposit in American Colonial Bank as collateral security to loan of \$400,000 made by the Mechanics & Metals National Bank to the people of Porto Rico—		
Municipal bonds .....	248,500.00	
School Board bonds .....	152,500.00	401,000.00
Held in trust and deposited in safety deposit vault of the Royal Bank of Canada as collateral security to \$1,255,000 refunding bonds—		
Municipal bonds .....	\$901,500.00	
School board bonds .....	350,000.00	1,250,500.00
<b>Total</b> .....		<b>1,661,500.00</b>

The amount of \$2,091,408.12 in cash is distributed and shown in Exhibit No. 23, in the section of "Disbursements."

## FINANCIAL CONDITION OF THE TREASURY FOR THE FISCAL YEAR 1918-19.

The income of the insular treasury for the fiscal year 1918-19 is estimated at \$6,057,000, as follows (Table No. 1):

Customs.....	\$370,000.00
Excise taxes.....	3,164,000.00
Property taxes.....	804,000.00
Telegraph and telephone receipts.....	94,000.00
Proportion of municipal income for sanitation.....	119,000.00
Court fees and fines.....	41,000.00
Interest on loans to municipalities and school boards.....	75,000.00
Interest on bank deposits.....	70,000.00
Miscellaneous income.....	65,000.00
Income taxes.....	1,190,000.00
Inheritance taxes.....	40,000.00
Harbor and dock fees.....	25,000.00
Total.....	6,057,000.00

Adding to this amount the sum of \$1,205,052.05, mentioned above, we have a total of assets in the sum of \$7,262,052.05 to meet the authorized appropriations and those appropriations for which no appropriation warrants have been issued, which are as follows:

Unexpended balance, fiscal year 1916-17.....	\$122,152.37
Unexpended balance, fiscal year 1917-18.....	344,222.10
Fiscal year 1918-19.....	5,066,648.20
Unexpended balance, no fiscal year appropriations.....	1,450,222.20
Appropriations during the first session of the ninth legislature in August, 1917, not set up.....	766,139.43
Appropriations authorized during the extraordinary session of the ninth legislature in February, 1918, not set up.....	169,000.00
Loans from the Mechanics & Metals National Bank of New York.....	400,000.00
Total.....	8,918,384.30

which would show a deficit of approximately \$1,656,332.25 considering the total amount of available assets, assets in transit and probable income for 1918-19. Exhibit No. 29 shows the net deficit, excluding appropriations not set up and other items.

In accordance with the last paragraph of section 34 of the organic act, the legislature shall not make any appropriations nor authorize any expenditures in excess of the total revenue provided for by law, including any available surplus in the Treasury, without providing at the same time for levying a sufficient tax to meet such appropriations or expenditures. This provision did not exist in any former organic act, and as it has already been shown, long before March 2, 1917, on which date the present organic act went into effect, many appropriations had been made relying upon the income and surplus of the insular treasury and we find that the total amount of liabilities, including expenditures for the fiscal years and no fiscal year appropriations for work of a more necessary and urgent nature, places the insular treasury in an embarrassing position.

*Suggestions for meeting this situation.*—A careful selection should be made of the most necessary or indispensable appropriations and the rest submitted at the next session of the legislature to be rendered null and void by appropriate legislation, thus extricating the insular treasury from this abnormal situation.

Among the appropriations which should be legislated out, I might mention the sum of \$287,161.46 for the construction of a capitol, \$117,508.89 for the construction of a penitentiary, and \$300,000 for the purchase of land on which to erect an insane asylum and for its construction, besides many other appropriations for which no appropriation warrants have been issued, as stated above, which are not considered necessary or indispensable for the present.

These public needs could, in my opinion, be met through a plan which would avoid encroachment upon the present revenue authorized by law or the surplus in the insular treasury. The total amount of general property taxes in round numbers reaches, this year, a total of \$3,000,000, which amount is used for the partial support of the insular government and to offset the expenditures of the municipalities and school boards and includes certain specific taxes for the payment of various municipal loans. To comply with the provisions of section 34 of the organic act, the incurring of any expenditures must be met with a corresponding amount of revenue. If the general property tax amounts to \$3,000,000, a bill could be introduced at the next legislature authorizing an issue of bonds in the amount of \$1,000,000 and levying a special tax of the small sum of 6 cents on the dollar for the creation of a sinking fund which could be denominated "Special insular bond redemption tax." With this tax we would accumulate \$180,000 during the first year and \$1,800,000 during the 10 subsequent years, which amounts would be amply sufficient, in my opinion, to meet the repayment of principal and the payment of interest on the bonds, which could

be offered at the advantageous rate of 5 or 6 per cent. This special tax, after payment of the full amount of the bonds, should remain in force so as to avail thereof for works projected for the further development and welfare of the island.

This bond issue, added to other bond issues now pending, and to the sum of \$9,150,000, which is the amount of the public debt, will not exceed the limit prescribed by section 3 of the organic act, which is 7 per cent of the total assessed valuation of the island, amounting to-day to \$244,000,000.

As 5 or 6 per cent is an attractive rate of interest, it is to be supposed that these bonds could be easily sold, but should such not be the case, by levying the additional tax indicated, beginning with the coming year, a special fund would be made up to meet expenditures on these works and such other works as might be of an urgent nature.

*Various sources of revenue.—Property taxes.*—Act No. 70, approved April 13, 1916, provides for additional revenue for the people of Porto Rico and fixes the general maximum quota to be received by the municipalities and school boards during the fiscal year 1917-18 and subsequent years, which is equal to the amount received from general property taxes during the fiscal year 1916-17; and provides, further, that the excess revenue derived from this source shall be retained for the use of the insular treasury.

Through a new general revision of the assessment made last year we obtained a total valuation of property of \$244,000,000, or an increase of \$62,000,000 over the assessment for the previous year, which reached the sum of \$182,000,000. This increase goes to the benefit of the insular treasury, aside from the proportional part fixed by law for the partial support of the insular government.

In the month of February, 1918, many of the municipalities and school boards of the island had begun to liquidate their taxes and by June of the same year all had been completely liquidated, receiving a total amount equal to the amount received during the fiscal year 1916-17, with the exception of Arroyo, Fajardo, Ceiba, Guayama, Luquillo, and Salinas, which have not been liquidated for the reason that part of the taxes in these municipalities were paid under protest and are now the subject of litigation in the insular courts.

At the close of the past fiscal year the total amount transferred from trust funds to the insular revenue funds of the treasury in accordance with the said Act No. 70 was as follows:

From municipalities .....	\$319,393.58
From school boards .....	106,884.61

as shown in Exhibit No. 19-B, "Excess over legal municipal and school board maxima," and Exhibit No. 27, which shows a total of \$426,278.19. In addition, there have been paid under protest, as has already been stated, taxes to the amount of \$210,831.52, which, when distributed, will complete the total amount due the said municipalities and school boards, and then transfers shall be made of the excess to the available funds of the insular treasury.

Taxes derived from the assessment of real and personal property on the island have produced the sum of \$3,055,169.11, although there is included in this amount taxes paid under protest and already distributed in the sum of \$19,102.30; taxes collected from previous fiscal years in the sum of \$4,940.70; and taxes paid under protest pertaining to the fiscal year 1917-18 in the sum of \$210,831.52.

In order to secure the greatest benefit from the provisions of Act No. 70 of 1916, it was necessary to collect the greatest possible amount of taxes before the close of the fiscal year on June 30, 1918, and if we consider that of the total amount of \$3,060,605.74 to be collected there was only pending at the close of the year the sum of \$62,376.54, the work performed by the collectors of internal revenue has been splendid. This good work was naturally expected, since the insular treasury had to depend largely thereon for the greatest amount possible of available funds.

*United States internal revenue.*—Section 9 of the organic act now in force provides that all taxes collected under the internal-revenue laws of the United States on articles produced in Porto Rico and transported to the United States shall be covered into the treasury of Porto Rico. The total amount received from this source, as shown in Exhibit No. 27, reaches a total of \$1,039,665.40 covering collections to March 31, 1918. There is included in this total the sum of \$57,898.62, corresponding to the month of March, 1917, and \$222,155.02, corresponding to the quarter from April 1 to June 30, 1917. These amounts pertain to the fiscal year 1916-17, but were received after the close of such fiscal year. Aside from these two amounts, the total revenue derived from this source during the fiscal year 1917-18 to March 31, 1918, is \$759,631.76, there remaining to be received the revenues for the quarter from April 1 to June 30, 1918, which will reach approximately the sum of \$200,000.

**Customs.**—In spite of present war conditions, customs duties have reached an amount of \$370,000, a good portion of which are import duties on Spanish articles.

**Excise taxes.**—The revenues derived from excise taxes reached an amount of \$2,144,875.64, which, compared with the amount derived from the same source last year of \$2,890,986.95, shows a decrease of \$746,111.31, due to prohibition. This reduction is counterbalanced by the new revenues herein mentioned. See Exhibit No. 27.

**Income taxes.**—The increase in the amount of the income tax collected, which has been \$156,724.41 more than last year, and other data connected therewith, are treated in another section of this report under the heading of "Income tax."

The various sources of insular revenue are shown in detail under Exhibit No. 27, already mentioned, which is self-explanatory.

**Indebtedness of the insular government.**—The total bonded indebtedness of the Government of Porto Rico (Exhibit No. 14), amounts to \$9,150,000 at the close of the fiscal year, or \$130,000 less than the previous year, which difference is explained as follows:

Bonded indebtedness at the close of previous year.....	\$9,280,000
San Juan Harbor improvement bond issue authorized by Act No. 23 of Apr. 12, 1917, sold this year.....	100,000
	9,380,000
Paid out in 1917-18—	
On account of issue Jan. 1, 1907.....	\$50,000
On account of issue Jan. 1, 1909.....	150,000
On account of issue July 1, 1916.....	30,000
	230,000
Total.....	9,150,000

There must be added to this total the sum of \$400,000 from a short term demand note with the Mechanics & Metals National Bank of New York, and \$350,000 from three temporary loans to provide funds for the food commission created by Joint Resolution No. 10, approved April 12, 1917, contracted with the following banks of San Juan:

American Colonial Bank.....	\$150,000
Banco Territorial y Agrícola.....	100,000
Banco Comercial de Puerto Rico.....	100,000

If to the sum of \$9,150,000 of bonded indebtedness we add these \$750,000 from short term loans, the total indebtedness of the insular government will reach a total of \$9,900,000, or \$20,000 more than in the fiscal year 1916-17.

Due to the abnormal conditions prevailing in the bond market, we have not been able to place two bond issues of 1918, which are now pending: one for \$200,000 approved by Act No. 23 of November 22, 1917, for the purpose of extending the benefits of the irrigation system by improving and enlarging the works and structures of the system constructed and already in operation, and one for \$500,000 authorized by an act approved April 13, 1916, for the construction of roads and bridges and for other purposes.

Up to the present, all bonds of the people of Porto Rico have been sold at a fixed interest rate of 4 per cent, but since the laws authorizing these two pending bond issues authorize also a maximum rate of 4½ per cent for their sale, it will be necessary to dispose of them at this rate, as otherwise it will be impossible to place them. Even so, bearing in mind that the bonds of the third Liberty loan accrue interest at the rate of 4½ per annum, and that we can not now predict whether this interest rate will be increased, and in what proportion, for future issues of these bonds, the legislature should take cognizance of the fact with a view to fixing a rate of interest more in harmony with present circumstances.

The issue of bonds in the amount of \$100,000 in 1917 for San Juan Harbor improvements, sold during the fiscal year covered by this report, brought a total amount of \$100,270, or a premium of \$270, which is a good proof of the sound financial credit of the island, present circumstances considered. Of this amount, \$86,000 were placed with insular banks; \$66,000 with the American Colonial Bank and the balance with the Banco Comercial.

As regards the indebtedness of \$350,000 of the food commission to the said banks in San Juan, I must draw attention to the fact that since the assets of this commission are not included in the assets of the insular treasury, the former handling these funds independently with its own depositaries, they should properly be discarded from the total indebtedness of the insular government. The food commission has not only responded in a most eloquent manner to the patriotic ends for which it was created, but it has as well, because of its competent administration, derived material profits and thus increased its financial resources, being now in a most favorable situation to meet its indebtedness.



An examination of the figures giving the balance in sinking fund to June 30, 1918, as per Exhibit No. 14, shows that there is available the necessary amount for the redemption of our first bond issue of January 1, 1907, and that during the coming fiscal year we will have accumulated more than the amount necessary for the payment of principal and interest on our second bond issue of 1910. Taking the present assessed valuation of the property on the island as a basis, it is almost certain that within the next following five years the balance in the sinking fund will also be sufficient for the redemption of the \$1,000,000 public improvement bonds of January 1, 1914, that is to say, 15 years before their maturity.

With a view to reducing the insular public indebtedness and as a result of the opinion of the attorney general referred to by my predecessor in his report for 1916-17, efforts have been made to purchase, from the insular treasury, the outstanding bonds of 1907, with the corresponding balance in the sinking fund, but this plan has encountered many obstacles in practice, and although the department of finance will continue to bend its efforts toward attaining the desired object, the treasurer is of the opinion that the problem will be greatly facilitated if, in future bond issues, the refunding of the former bonds into bonds of a new issue is authorized in such proportion as will be covered by the balance in the sinking fund. As has been already stated, any new bond issue should have to be made at a rate of interest higher than 4 per cent, and their exchange for previous convertible bonds would be profitable to the present bondholders.

**Banking.**—As will be seen from the statement inserted below, in comparison with a similar statement for the fiscal year 1916-17, banking activities in the island have been increased with the opening of two new banks—El Banco de Ponce, located at Ponce, with a capital stock paid in of \$250,000, and a branch of the National City Bank of New York, which having been opened only recently at San Juan has performed such preliminary work as has been necessary for its installation only, but which will doubtless constitute in the future an important factor in the development of the banking business in the island, taking into consideration the solid resources of its main office in New York City and the high credit it has attained in the financial world. Aside from the Banco de Puerto Rico, the liquidation of which is now nearing its close and which is being substituted by the Banco Comercial de Puerto Rico, there are 13 corporations of this nature established on the island, the oldest being the Banco Comercial de Puerto Rico, successor to the old Banco Español de Puerto Rico; the Banco Territorial y Agrícola and the Crédito y Ahorro Ponceño, which during the precarious financial situation which confronted the general wealth of the country following the devastation caused by the cyclone of August 8, 1899, commonly known as "San Giriaco," cooperated to save a great portion of our property owners from destitution, who would certainly have run to utter failure had it not been for the benevolence and liberal assistance of these banks. Of these 13 banking institutions, 5 have established 13 branches in the most important towns of the island, thus favoring transactions away from the district of San Juan and contributing to the progress of Porto Rico in all its financial activities.

It should be admitted, however, that the great mass of our small landholders lack banking facilities for the development of their properties, and therefore the establishment of a credit corporation which could advance them the necessary funds at a reduced rate of interest, with long and easy terms for payment, is a crying need. This matter has attracted the interest of both our executive and legislative powers, and it is to be hoped that if concurrent resolution No. 1, passed at the extraordinary session of our last legislature, "Praying the Congress of the United States to extend to Porto Rico the laws commonly known as the 'Rural credits' and 'Vocational education' acts," is favorably considered by the National Congress, a long forward step will thus have been taken in bettering the financial situation of our small landholders.

An examination of the consolidated report of the banks in operation at the close of business on June 30, 1918, as compared with the report for last year, shows the following differences:

<b>Resources:</b>	
On loans, an increase of .....	\$6,369,596.07
On bonds and stock investments, an increase of .....	345,130.30
On reserve cash fund in bank, a decrease of .....	890,067.01
On balances with other banks, bankers, and correspondents, a decrease of .....	4,250,357.73
On real estate, an increase of .....	8,600.99
On expenses, pending general balance, an increase of .....	755.54
<b>Liabilities:</b>	
On capital stock paid in, an increase of .....	392,283.34
On reserve fund, an increase of .....	62,121.03
On undivided profits, an increase of .....	106,261.36
On individual and Government deposits, an increase of .....	970,439.21
On balances due other banks, bankers, and correspondents, a decrease of .....	46,866.46
On profits accounts pending general balance, an increase of .....	23,297.50
On mortgage bonds issued, a decrease of .....	20,600.00

From the foregoing statement it is noted that while the cash reserve in the banks has decreased by about \$1,000,000, the increase obtained in loans only exceeds this difference by over \$5,000,000. If we add to this the increase in the reserve funds and undivided profits of these corporations, it is easily appreciated that their continued growth is a mathematical fact, based on the eloquence of figures.

I shall not close this part of my report without repeating what has been said time and again by my predecessors in office, as to the necessity of adequate legislation for the banks in Porto Rico. As to their history, the island may well be proud of them, as not a single bankruptcy case has been registered since their inception; on the contrary, their financial situation has year by year grown more solid, thus winning absolute trust at home and enjoying most desirable credit abroad. However, in our legislation now in force we include and consider the banks as governed by the general corporation law, without bearing in mind that their special nature and distinct purposes call for special and distinct statutes to govern them. I am of the opinion that bill No. 19 of the senate, which failed of passage at one of our previous legislatures, should be submitted again at the next session, since its approval would meet for the present the necessity of a law to govern such an important factor, as are the banking institutions, in the economic life of Porto Rico.

*Insurance.*—The following table (No. 3, "Transactions in Porto Rico by insurance companies in the calendar year 1917") shows in detail the volume of business done by the various companies of this nature on the island. To be able to judge of the growth of this business, in connection with the business transacted during the year 1916, it is necessary to establish comparison of the profits for both years, which are herein shown in two sections, as follows:

	Insurance written.	Premiums thereon.
<b>Increases in 1917:</b>		
Fire Insurance.....	\$42,222,895.65	\$46,461.40
Marine Insurance.....	855,532.49	20,845.90
Accident Insurance.....	96,500.00	268.25
Fidelity Insurance.....	1,062,172.93	6,955.85
Liability Insurance.....		8,306.65
Property damage Insurance.....	201,750.00	4,820.08
Hurricane Insurance.....		3,780.76
Steam-boller Insurance.....		3,370.00
Marine and war insurance.....	6,189,657.77	29,173.33
	50,658,508.84	123,962.22
<b>Less decreases:</b>		
Hurricane Insurance..... \$255,610.00		
Steam-boller Insurance..... 45,000.00		
Health Insurance..... 4,000.00		
	304,610.00	
<b>Total increases.....</b>	<b>50,353,898.84</b>	<b>123,962.22</b>

From the foregoing statement it is seen that at the close of the fiscal year to which this report refers, insurance companies in Porto Rico issued policies to the amount of \$50,353,898.84 more than during the previous year of 1916, from which difference they derived a larger profit by \$123,962.22 on account of the premiums collected.

	Losses paid.	Losses incurred.
<b>Decreases in 1917:</b>		
Fire Insurance.....	\$245,696.26	\$270,962.46
Marine Insurance.....	15,064.32	44,917.32
Accident Insurance.....	376.38	274.38
Fidelity Insurance.....	1,188.86	3,224.76
Hurricane Insurance.....	26,960.30	26,960.30
	294,709.12	346,451.22
<b>Less increases:</b>		
Liability Insurance.....	1,175.18	2,860.18
Property damage Insurance.....	1,416.57	1,721.57
Marine and war Insurance.....	3,797.60	3,797.60
<b>Total decreases.....</b>	<b>288,319.77</b>	<b>338,071.88</b>

If to the increase of \$123,982.22 which these companies obtained on premiums collected during 1917 we add \$288,319.77 for decreases on account of "casualties" paid during the same period, it is seen that they have made a profit of \$412,301.99 over their gross profits for the year 1916.

For premiums to the amount of \$558,287.38 collected in the year 1916, these companies paid out losses to the amount of \$390,450.41, or nearly 70 per cent of their income. In the year 1917 they received premiums to the amount of \$682,269.60 and paid out losses to the amount of \$102,130.64, or only 15 per cent of their income during that year.

On December 31, 1916, the life insurance companies had policies in force in Porto Rico in the amount of \$5,737,038.34, while at the close of the year 1917 these policies amounted to \$6,202,883.34, or an increase of \$465,845 over the previous year. See Table No. 3.

#### BUREAU OF PROPERTY TAXES.

*Assessment.*—The first general assessment of all real and personal property in Porto Rico was effected in the fiscal year 1901-2, with a total valuation of \$96,430,994. A new general revision of the assessment, projected in 1910, was commenced in the fiscal year 1910-11, but it could not be terminated until the fiscal year 1912-13 because of the small number of assessors provided for the department at the time for that purpose. As a result of this new revision, the total valuation of the property, for assessment purposes, reached the sum of \$178,833,603, or an increase of \$82,402,609 over the former assessment. By virtue of joint resolution No. 19 of our legislative assembly of April 13, 1916, a general revision of the assessment was made with the cooperation of a special force of assessors in addition to those who were already filling budgetary positions in the department, and thus the assessment valuation for the fiscal year 1917-18 reached the sum of \$244,064,538, which shows an increase of \$65,230,935 over the figures for 1912-13, or 36 per cent over the assessment for 1912-13 and 153 per cent over the first general assessment of 1901-2. This growth of the general wealth of Porto Rico has been mainly due to the great development of the sugar industry, as well as the establishment of new industries and the increase in commercial activities.

The assessment of the property on the island has been carried out in conformity with the principles established by the board of review and equalization, which, taking into consideration the location of the property, topographical conditions, its proximity to the public roads and railroads, cultivation and irrigation systems, its distance from the urban zone, and other important factors, has performed a labor which is as just and equitable as has been humanly possible.

The assessed valuation of all property on the island for the fiscal year 1917-18, excluding corporations, reached the sum of \$187,297,932, which yielded a tax return of \$2,340,082.41.

The assessment of corporations is made in accordance with the provisions of section 317 of our Political Code, which provides that—

"The present actual value of the personal property or institutions, corporations, and companies incorporated under the laws of Porto Rico other than banking institutions having a share capital shall \* \* \* in no case be less than the value of the capital stock and bonds plus the surplus and undivided earnings of said institutions, corporations, and companies, nor less than the market value of the real and personal property of said institutions, corporations, and companies, including in personal property rights, franchises, and concessions. From the valuation thus obtained shall be deducted the total valuation of real property of said corporations, as ascertained in accordance with the provisions of section 316, and the remainder shall be deemed to represent the personal property of said corporations for purposes of taxation."

During the fiscal year covered by this report there were 290 corporations on the island, the assessment of which amounts to \$56,766,606, on which there has been levied a tax of \$720,523.33. The total assessed valuation of all corporation and individual property for the last fiscal year, revised up to December 31, 1917, reached the amount of \$244,064,530, and the total amount of taxes both from individual property owners and corporations is \$3,060,605.74, distributed as follows:

Insular tax, one-tenth of 1 per cent.....	\$246,051.80
Municipal tax, nine-tenths of 1 per cent.....	2,194,661.63
School tax, at different rates, not exceeding one-tenth of 1 per cent.....	238,483.27
Insular bond redemption tax, one-tenth of 1 per cent.....	243,851.29
Municipal bond redemption tax, at different rates, according to municipality.....	137,557.75
Total.....	3,060,606.74

In accordance with Act No. 70, approved by the Legislative Assembly of Porto Rico April 13, 1916, of the said amount of \$2,194,661.63, of municipal tax, the municipalities receive \$1,651,724.51, as per distribution made during the previous fiscal

year, and the remainder, or \$542,937.12, goes to the insular treasury for its use and benefit. Thus, adding to this amount the sum of \$246,051.80, of the one-tenth of 1 per cent of insular tax, the insular treasury receives \$788,988.92 for general expenditures. Part of this total amount has remained uncollected at the close of the fiscal year, as shown in Exhibit No. 19.

The result of the general assessment for the fiscal year 1917-18 is found in detail in the tables annexed to this report, which are self-explanatory, and show:

- (a) Total assessed value of real and personal property, by municipalities, Table No. 4.
- (b) Tabulation of assessed value of real property, by municipalities and classes, Table No. 5.
- (c) Number of acres, by municipalities and classes, Table No. 6.
- (d) Average value per acre, by municipalities and classes, Table No. 7.
- (e) Total assessed value of personal property, by municipalities and classes, Table No. 8.
- (f) Number of heads of live stock and vehicles and average value per unit, Table No. 9.

All these tables are corrected to December 31, 1917.

*Land holdings in excess of 500 acres.*—At the request of the Governor of Porto Rico, a report was prepared by this department of all real estate used for the purpose of agriculture and held either directly or indirectly by corporations, partnerships, or individuals in holdings in excess of 500 acres in the island, which report was to be submitted to Congress in accordance with section 39 of the organic act of Porto Rico.

The work of gathering these data has been considerable, as we had to secure information not only from the records in this office, but from the collectors of internal revenue, the registrars of property, the assessors, and from the individuals and corporations directly, as well.

This statement was submitted in due time and has already been published, for which reason I am only giving at present a report, by nationality, of all the real estate used for the purpose of agriculture and held either directly or indirectly by corporations, partnerships, or individuals in holdings in excess of 500 acres. (See Table No. 10.)

*Uncollected taxes.*—The total net amount of taxes assessed and levied for the fiscal year 1917-18 is \$3,060,605.74. Of this amount the sum of \$3,014,481.77 has been collected during the year, leaving a total amount of taxes pending collection on June 30, 1918, of \$46,124.37. The accumulation of taxes uncollected from the beginning of the present tax system shows an amount of \$16,252.17, making a grand total of \$62,376.54 of uncollected taxes. (See Exhibit No. 19.)

Of this total, the greater portion of the amount of \$11,940.50 corresponds to two corporations and the collection of which has been suspended by order of injunction granted by the United States District Court for the District of Porto Rico. The remainder of that amount is due from a sugar corporation and an individual property owner now in bankruptcy proceedings in the Federal court.

The amount of \$21,960.65 is under investigation as to the correctness of claims which have been presented against the assessment. Of this amount, the sum of \$20,732.14 is due from the Fajardo Sugar Growers' Association, of which it has already paid \$10,366.08 under protest.

The amount of \$12,131.12, which is an accumulation of taxes due from the year 1901-2, is considered uncollectible, the assessed properties having disappeared and the persons subject to the tax owning no other property whatever. Most of the tax receipts so pending shall be canceled in accordance with Act No. 5, approved April 11, 1917.

The balance of \$16,344.27 of uncollected taxes up to June 30, 1918, includes certain taxes collected after that date, for which reason they do not appear in this report, and includes also taxes on properties which had escaped assessment from the year 1901-2 to 1917-18, but which have been assessed during the last fiscal year, in accordance with section 303 of the Political Code.

Even though the amount of taxes pending collection is relatively small, it should be borne in mind that the general assessment recently made of all property on the island naturally has given rise to a considerable number of claims and attending delay in the preparation of tax receipts.

*Income tax.*—This source of revenue has been constantly increasing in Porto Rico, and the increase is mainly due to the high prices which obtained during the past recent years for sugar and tobacco, which constitute the principal crops of the island. All revenues collected in Porto Rico from the income tax accrue to the insular government, according to the terms of the act of Congress of the United States of 1918, whereby the income tax was extended to Porto Rico. The total yield from this source for the last 10 months of the year 1918 was \$50,000. In the year 1914 the total yield was \$70,000. For 1915 this total was increased to \$120,619.96, which amount, added to

some \$16,000 collected from levies of preceding years, made a total of \$136,353. In 1916 the amount derived from income returns reached a total of \$408,415.48, and the levy during the year 1917 has reached a total amount of \$493,012.03. The great increase in revenue obtained from this source during the year 1916 is, of course, due to the terms of the act of Congress of September 8, 1916, which raised the normal income tax from the prevailing rate of 1 per cent to 2 per cent. The total assessed income to June 30, 1918, for the year 1917, to the amount of \$493,012.03, shows an increase of 20.71 per cent as placed against the amount of \$408,415.48 assessed income to June 30, 1917, for the year 1916. In addition to the said tax assessed for the year 1917, there is a total of \$79,724.81 assessed after June 30, 1918, pertaining also to the year 1917.

According to section 5 of the United States war tax act approved October 3, 1917, the provisions thereof shall not extend to Porto Rico, and in lieu thereof the insular legislature has enacted an "Act to provide additional revenue for the people of Porto Rico through the levy of certain additional income taxes, and for other purposes," approved December 4, 1917, which, in addition to any normal or additional tax imposed by existing law, establishes a graduated income tax upon the income, benefits, or profits derived from any source in Porto Rico during the fiscal year 1917-18, in the following manner:

One per cent per annum upon the amount by which the total net income exceeds \$2,000 and does not exceed \$25,000; 2 per cent per annum upon the amount by which the total net income exceeds \$25,000 and does not exceed \$50,000; 3 per cent per annum upon the amount by which the total net income exceeds \$50,000 and does not exceed \$75,000, and 4 per cent per annum upon the amount by which the total net income exceeds \$75,000.

The total amount of income to be derived from this insular income tax law during the fiscal year 1918-19 is estimated at \$700,000.

The number of persons subject to the income tax has been gradually increasing, as shown in Table No. 11, the total number in the year 1915 having been 1,088, 1,288 in 1916, and 1,564 in 1917; also the taxpayers subject to the additional tax, which in 1915 reached a total of 66, 130 in 1916, and 174 during the year 1917. The difference noted between the total number of taxpayers subject to the additional tax which appear in the statement for the years 1915 and 1916, and the number herein reported, lies in that in the classification of the number of taxpayers into graduated subdivisions from \$20,000 to \$50,000 a single taxpayer may be mentioned seven times, for the reason that if his income reaches the amount of \$250,000, he will be classified in each one of the subdivisions from \$20,000 to \$250,000. This repetition is obviated in the statement showing the number of taxpayers during the year 1917.

If this insular enactment is going to continue in force, the treasurer would suggest that it be made to conform to the Federal income-tax law as to the period for rendering returns in such a manner that only one return be required from taxpayers, thus simplifying the work both for the taxpayers and the department. As it is at present, the Federal law covers the income for the calendar year, while the insular law covers the income for the fiscal year, thus requiring two separate returns, which is somewhat troublesome to the taxpayer and increases considerably the clerical and inspection work incidental thereto in the department of finance. There is no doubt that in the future the income tax will be one of our main sources of revenue, and if expectations are realized, the establishment of a new bureau of income tax in lieu of the present income-tax subdivision of the bureau of property taxes will become indispensable.

*Inheritance taxes.*—The total amount of the inheritance taxes collected during the fiscal year just closed exceeds by 100 per cent the tax collected during the year 1916-17, as shown from the following figures:

	1916-17	1917-18	Increase.
Amount of inheritance exempted from tax.....	\$966,857.03	\$916,449.45	\$49,502.42
Inheritances liquidated.....	1,349,290.65	1,867,051.91	517,761.26
Total.....	2,216,147.68	2,783,501.36	567,353.68
Taxes collected.....	31,616.24	63,417.69	31,801.45
Pending collection.....	199.80	4,642.98	4,443.18
Total tax levied.....	31,816.04	68,060.67	36,244.63

These figures do not mean, however, that the value of the inherited property has increased in the same proportion, but that the tax rate differs according to circumstances.

## BUREAU OF EXCISE TAXES.

*Excise tax receipts.*—The revenue derived from excise taxes during the fiscal year 1917-18 reached the amount of \$2,144,875.64, which, compared with the amount derived from the same source last year, shows a decrease of \$746,111.31.

The decrease shown in the receipts from distilled spirits, wines, beers, and other alcoholic beverages (Table No. 12), as well as the reduction in the number of corresponding licenses issued, was the expected result of the effects of prohibition. None of the above referred liquors may be legally sold to-day except for medicinal, sacramental, industrial, or scientific purposes.

There has been also a noted decrease in the dispatch of cigars for consumption in Porto Rico, which is partly due to conditions brought about by the general strike of cigar makers prevalent during the months of October, November, and December, 1917.

The said decrease, amounting to \$746,111.31, has been covered in part with a surplus of \$293,574.09 from United States internal revenues, without including some \$200,000 which are estimated to be pending collection and which correspond to the last quarter of the fiscal year 1917-18, as previously stated in this report. These amounts belong to the government of Porto Rico by virtue of the organic act of March 2, 1917, and are collected by the Federal Government as internal-revenue taxes on distilled spirits, cigars and cigarettes, and other taxable articles shipped from Porto Rico to the United States for consumption. The total revenues received from March, 1917, to March, 1918, amount to \$1,039,685.40.

While collections derived from the excise laws recently approved have helped in part to cover the decrease caused by prohibition, in applying them it has been found that they fall quite below the expected mark in producing revenue, but could be made more productive by introducing slight modifications therein; as, for instance, the inclusion of other articles used for the same purpose as those which are being taxed and also similar trades having relation thereto, which were overlooked. In this connection reference is made to acts 31, 69, and 15, and former laws relative to luxuries, tobacco, and beverages.

*Distilleries and liquor licenses.*—During the first eight months of the present fiscal year there were in Porto Rico seven distilleries engaged in the manufacture of alcohol, and there was issued a quarterly average of 5,548 revenue licenses for the manufacture and sale of intoxicating beverages. With the enforcement of prohibition the number of distilleries has been reduced to five, of which only two are in ordinary operations; the others have discontinued distillation and are liquidating the remaining stock for medicinal and industrial purposes. The most important distillery on the island has continued in full operation for the main purpose of shipping alcohol to the United States for other than beverage purposes. The business of rectification of spirits, conducted separately and apart from distilleries, has been discontinued. Liquor dealers' licenses have been reduced to 96 for retail and 6 for wholesale. Under existing laws the holders thereof may legally sell liquors for medicinal, sacramental, industrial, and scientific purposes only.

Alcohol production up to March 1, 1918, which marked the enforcement of prohibition, amounted to 1,454,455 liters, of which 405,987 were dispatched for consumption in the island. In addition 43,600 liters for alcohol were dispatched, free of tax, to be denatured for industrial purposes. Alcohol exports during the first eight months reached a total of 733,677 liters, the greater part of which was shipped to the United States and was partly produced from materials prohibited by the food-control act, being therefore exported for other than beverage purposes. There have also been dispatched 98,520 liters for the manufacture of perfumery, with benefit of drawback, for domestic consumption, some of these having been obtained upon payment of the tax, to be refunded when elaborated.

The exportation of alcohol elaborated into bay rum amounted to 81,700 liters. The production of alcohol during the last four months of the fiscal year has been so insignificant as to scarcely merit mention, only 261,112 liters having been manufactured during that time. The total amount of alcohol dispatched for medicinal and industrial purposes during these four months reached 7,610 liters. During the same period 194,192 liters of commercial alcohol were exported. In addition, 14,271 liters of alcohol were elaborated into bay rum for exportation. Since repeal on March 2, 1918, of drawback privilege previously enjoyed by manufacturers of bay rum, revenue to the amount of \$6,090.36 was covered into the Treasury, corresponding to 21,751 liters of alcohol released for the manufacture of perfumery and medicines at the rate of 28 cents per liter. The total amount of alcohol denatured for use in Porto Rico during the period from March to June 30, 1918, was 61,905 liters. Some of this alcohol has been used in experiments as motor fuel for machinery and automobiles and cases have been reported of satisfactory results. Upon taking up the matter with the distillers

it has been noted that they have hopes for further progress of the application of alcohol for industrial purposes, which, if successful, will afford greater opportunities for their product. Although at present receipts derived from this industry are inconsiderable, it might in the future be a valuable resource, and as such should receive due consideration.

With reference to the law regulating the sale of intoxicating beverages for medicinal purposes, practice has revealed the necessity of amending them so as to prevent the abuse of the privilege granted by law in connection with the prescription of intoxicating drinks and also to place responsibility upon the consumer for using beverages for other purposes than those for which they are prescribed.

*Malt beverages.*—The only established brewery on the island has continued operations, but it has been required to reduce the alcoholic volume of its products to 2½ per cent, and the amount of material used in the production of beer, to 70 per cent of the amount used during the period from January 1, 1917, to January 1, 1918, in accordance with the food control act of August 10, 1917. This brewery produced during the fiscal year some 826,120 liters of beer, of which 704,742 liters were dispatched for local consumption and 121,378 liters were exported to neighboring islands, principally to Santo Domingo. There is a considerable amount of malt beverages being introduced into the island which do not contain alcohol in any proportion and are not therefore liable to taxation.

*Matches and cigarettes.*—According to statistics, the receipts most worthy of mention with the exception of those obtained under the new excise laws are those derived from matches and cigarettes. The receipts from the former have surpassed those of previous year by \$28,009.81. A total of \$56,343.39 was produced from this source this being the largest amount on record collected on matches during one fiscal year. The latter item shows an increase over last year of \$27,013.82.

*Motor vehicles.*—Of all articles subject to tax under the new excise laws enacted by the last legislature, the item of motor vehicles promises to bring the largest revenue. A total of \$28,354.28 was collected on articles of this class from March 1 to June 30, 1918. Within the definition of the term "motor vehicles," all automobiles, motor trucks, motorcycles and motors for bicycles, tires, and tubes are included. In this connection it is earnestly recommended that the existing law be amended so as to include all kinds of accessories pertaining to motor vehicles.

*Miscellaneous.*—The increase shown under the heading "Miscellaneous" is derived from the new tax law on public documents. This item produced some \$100,418.51 in revenues collected from March 1 to June 30, 1918, as against \$87,289.75, revenues collected during the same period of 1918, with an excess of \$13,128.76.

*Diamonds and other precious stones.*—The provisions of section 17 of the law approved November 30, 1917, which levies taxes on diamonds and other precious stones, have not brought perceptible results in receipts, due to the fact that they are applicable only to loose unmounted stones, and importations of these are exceptional in Porto Rico. Therefore, it is deemed advisable that the present law be amended so as to include all kinds of jewels and mounted precious stones.

*Cinematograph films.*—It is suggested that the provisions of the same law which fixes a 5 per cent ad valorem tax on all cinematograph films, be modified to the effect of levying the tax by linear measure for the purpose of establishing the same taxing system prevailing in the United States. It is believed that the change would not only increase the revenue, but that the law would be more practical of enforcement.

*Excise tax cases.*—The number of violations of the law reported by the internal-revenue agents during the year reached 1,550. Of these, 1,336 were settled administratively by the treasurer of Porto Rico by the imposition of fines ranging from \$1 to \$10, which were duly collected. One hundred and thirty of these cases were filed without the imposition of any penalty and 9 were suspended without the collection of the fines imposed. Seventy-five of the above cases were taken to the courts, obtaining 57 convictions and 14 acquittals. Four of these cases were dismissed by the courts.

*Guaranty stamps.*—The law covering the guaranty stamps for leaf tobacco, which is mentioned in last year's report, has been lately amended so as to include not only cigars exported from Porto Rico but also leaf tobacco exported and cigars for local consumption.

The question of the validity of this law has been contested by the Porto Rican American Tobacco Co., manufacturers and exporters of cigars, of San Juan, before the District Court of the United States for Porto Rico. By virtue of a restraining order issued by this court, this corporation is at present exporting its cigars without the guaranty stamps, having shipped during the months of April, May, and June, 1918, some 60,002,891 cigars, the stamps for which would amount to \$21,886.49.

The lack of sufficient personnel for the inspection of tobacco and the preparation of statistics has been felt during the period of four months the law has been in force,

only three experts having been assigned by the legislature for this work. The treasurer of Porto Rico has for this reason been compelled to divert the attention of the regular internal-revenue agents, who were already overburdened with other duties, in order to assist the tobacco experts in their important work. I may state here that the salaries and per diems assigned to these employees are not commensurate with their knowledge and experience in the tobacco business, and for this reason it is almost impossible to secure efficient men to fill these positions.

For the enforcement of the guaranty stamp law, the island has been divided into three tobacco-inspection districts, each district comprising from 24 to 28 towns. It is therefore readily seen that such an extensive territory can not be efficiently covered by one agent. The services of two more agents at least should be engaged, in order to divide the island into five inspection districts, each comprising from 14 to 16 towns, and thus a more reasonable distribution of the inspection could be secured.

The matter of the stamp that should be used definitely and other provisions whereby the law might be made more effective will be taken into consideration as soon as its validity is decided in the case presented by the Porto Rican American Tobacco Co.

Detailed statistics in connection with this section of my report are annexed and show:

(a) Sources of excise taxation in Porto Rico, the quantity of merchandise, in the case of specific and the value thereof in the case of ad valorem tax levied; tax paid during the past four fiscal years and the amount of such tax collected, including licenses and miscellaneous, Table No. 12.

(b) Average number of licenses issued during the past six fiscal years, with revenue received therefrom, Table No. 13.

(c) Taxable articles exported from Porto Rico during the past five years, free of tax, Table No. 14.

(d) Leaf tobacco grown and imported in Porto Rico, exportation of leaf tobacco and elaboration of cigars for exportation and consumption in Porto Rico, and guaranty stamps affixed to these articles, Table No. 15.

#### BUREAU OF MUNICIPAL FINANCE.

*Receipts.*—The receipts of the municipalities from all sources during the year, excluding the proceeds of loans and bond redemption taxes, amounted to \$2,003,657.59, consisting of \$1,881,235.95 in "ordinary funds" and \$122,421.64 in "road funds." Receipts from taxes decreased from \$1,455,673.15 in 1916-17 to \$1,415,863.78 in 1917-18, this decrease being due mainly to the falling off in the collection of taxes on the sale and slaughter of meat, doubtlessly because of the restrictions imposed by the food commission upon the consumption of meat and which war conditions have made necessary.

Receipts from public service enterprises, including water-supply systems, electric-light plants, and piers, increased \$25,562.10. Of this increase, \$18,152.27 pertained to receipts from waterworks, partly due to the completion of water-supply systems in several municipalities; and \$10,329.72 to receipts from business licenses on account of the increase in industrial and commercial activities.

From the use of municipal properties the municipalities derived during the past year the sum of \$112,673.54, a decrease of \$1,986.65 below the preceding year. While almost all the sources of revenue included in this classification showed increases, there was a marked decrease in receipts from markets, this decrease being due mainly to the fact that most of the municipalities, at the request of the food commission, did not enforce collection of taxes for the use of stalls for the sale of fruits.

While the increase in receipts from public service enterprises tended to offset the decrease in other current receipts, it must be remembered that many of these revenue-producing enterprises were acquired by means of loans and with the expectation that the revenues they produced would be needed to help repay the loans. These revenues should not, therefore, be counted upon to make additional provision for the current needs of the municipalities.

*Expenditures.*—Expenditures chargeable against the total current receipts of the municipalities amounted to \$2,059,509.32, an increase of \$8,002.81 over the preceding year. Disbursements on account of current expenses, as distinguished from outlays and payments on indebtedness, were \$107,062.98 greater than in 1916-17, distributed among the items under that heading, viz, an increase of \$44,599.56 in salaries, \$10,887.62 in repairs and maintenance, and \$51,575.80 in supplies, materials, and incidentals. The actual cost of running the municipal governments during the past year was really greater than in any previous year, due to the considerable increase in the cost of materials and supplies in the market and the high cost of living caused by the present war.



Expenditures from current receipts for constructions and improvements showed an increase of \$7,353.05 over the previous year, most of which occurred in the items of streets and hospitals. The total expenditures on rural roads amounted to \$107,278.40, a decrease of \$10,827.96 below the preceding year.

The expenditures are listed in considerable detail in Table No. 16, and afford a comparison with similar tables published in previous reports. An examination of this table is on the whole favorable to the municipal administrations, as it demonstrates that in spite of the enormously increased prices demanded for commodities of all sorts which the municipalities, as well as other going concerns, must use, the current cost of government has not been increased to an alarming extent. It should be noted—and this is certainly a credit to the municipalities—that the amount of unfunded debt in 1917-18 is \$25,266.11 against \$106,977.57 in 1916-17.

*Available funds for general expenditures.*—The cash balance of “ordinary funds”—that is, those available for general expenditures, as distinguished from “road funds,” “loan funds,” and others, the use of which is restricted to specific purposes—was \$166,747.35, a decrease of \$57,496.03 below the preceding year. Deducting from this balance the amount of floating and current indebtedness carried over to the next fiscal year, there remains a surplus of \$141,481.24. It should be noted, however, that the municipalities of San Juan, Ponce, Aguadilla, and Juana Diaz were compelled to make emergency loans in order to carry on the municipal services during the year.

A comparison of the amounts received from the several sources of municipal income in 1916-17 and 1917-18 will be found in Table No. 17. A detailed statement of receipts for the year appears in Table No. 18.

*Municipal indebtedness.*—The policy of the executive council with regard to the matter of loans to municipalities and school boards has been one of extreme conservatism. This is the reason why during the fiscal year 1917-18 the insular government has made no loans to municipalities, and the municipalities of San Juan, Ponce, Aguadilla, and Juana Diaz and the school board of Guanica have found it necessary to contract loans aggregating \$156,000 from banking institutions or private individuals. In addition to these loans, the municipality of San Juan, availing itself of the authority contained in joint resolution of the Legislature of Porto Rico “Authorizing municipal corporations of Porto Rico to contract indebtedness, borrow money, and issue bonds for the exclusive purpose of executing works tending to supply water, construct and repair roads, and other conveniences to facilitate and aid the Federal Government of the United States in the establishment and maintenance of military camps,” issued bonds in the sum of \$300,000 to be covered by a special tax, for the purpose of aiding the Federal Government in the establishment and maintenance of Camp “Las Casas,” located at Santurce.

In addition to the funded indebtedness, amounting to \$2,222,389.80, the municipalities closed the year with reported current indebtedness of \$4,630.89, being indebtedness incurred within budgetary appropriations but not paid before the end of the fiscal year, and reported floating indebtedness to the amount of \$20,635.22, being indebtedness incurred in excess of the budgetary appropriations. This latter item is exceptionally small as compared with the amount of such indebtedness incurred during the year 1916-17, amounting to \$95,343.55, and during the year 1915-16, amounting to \$126,490.83.

*General remarks.*—The financial conditions of the municipalities of the island are in the main excellent, as may be seen from the tables already mentioned illustrating their financial operations for the year. It is sufficient to state here that in spite of the abnormal conditions prevailing, almost all the municipalities have closed operations with surpluses at the end of the year.

The only problem at present confronting the department of finance is that of making such advances or loans to the municipalities of the island as may be deemed advisable from time to time without thereby incurring the risk of embarrassment to the insular government through having too large a proportion of its funds in such condition as might prevent their being quickly obtainable in case of necessity. This problem was met by a resolution approved by the executive council August 6, 1918, providing that “the secretary of the executive council be directed to inform the ‘alcaldes’ of all municipalities of Porto Rico that hereafter, and until otherwise provided, the municipalities are authorized to enter into negotiations with banking institutions or private individuals for loans or advances, submitting for the approval of the executive council the proper ordinances providing for such loans.”

#### OTHER WORK PERFORMED BY THE DEPARTMENT.

*Liberty Loans.*—The department of finance has been intrusted with the administration or management of the financial phase of the Liberty Loans floated in Porto Rico. This work has been increasing considerably, to such an extent that it has been neces-

nary to organize a special division in this department for exclusive attention to the various matters connected with these loans, foremost among which is the handling of large amounts of money which must come through this division in its natural relation to the purchasers of the bonds and the Federal Reserve Bank of New York until final settlement of subscriptions.

The dispatch of a great amount of official correspondence, the keeping of some 90 different accounts, and the general management of the work so as to obtain the best results has all been attended to by active and competent employees selected in the department.

Although the work has been of a highly arduous nature, the department of finance is more than pleased at its results, since without marring the efficiency of ordinary services in these offices we have come ahead in our endeavors, and after receiving and handling approximately \$4,000,000 liquidations were always absolutely normal without the slightest difference. The funds collected are deposited with the American Colonial Bank, and this bank willingly and without charge transmits them to New York for the account of the treasurer.

As regards the result of the subscriptions, it is highly gratifying to see how our people are familiarizing themselves with the purchase of Government bonds, and the promptness and loyalty with which they have responded to the Nation's call, in such a way that there is not at present a single town in the island which has not gallantly contributed with its money and enthusiasm to the success of the Liberty Loan last floated. Of the municipalities in the island 29 won an honor flag, foremost among which were Guanica, which covered its quota seven times and over; Fajardo, with an excess of 54 per cent; Barceloneta, with an excess of 48 per cent; San Juan, 47 per cent in excess; Manati, 39 per cent; and Salinas, 38 per cent. Thus, while the first Liberty Loan brought \$600,000, according to statement made by Mr. Charles F. Hill, ex-treasurer of Porto Rico, in his annual report for last year, the second Liberty Loan was closed with a total of \$1,986,900, and the third Liberty Loan with a total amount of \$2,783,050. And this is the more gratifying when considering that while the number of subscribers to the second Liberty Loan reached a total of 4,877, this number was increased to 8,714 subscribers during the third Liberty Loan campaign, or 3,837 over the former figures, and in spite of the unfavorable circumstances which prevailed at that time, such as the difficulties in transportation encountered by the sugar, coffee, and fruit growers, this result was realized because of united and decided effort on the part of everyone, special mention being made of the banks and the collectors of internal revenue throughout the island, which, under instructions from the central office, cooperated in a splendid manner toward the success of the campaign. The following figures will give an idea of the activities in these offices from April 24 to date in connection with the Liberty Loan funds:

Amount subscribed through the department of finance.....	\$2,312,400.00
Remitted:	
Apr. 24.....	\$11,120.00
Apr. 28.....	31,355.00
May 8.....	1,038,747.50
May 10.....	120.00
May 15.....	3,610.00
May 29.....	223,502.50
June 7.....	57,795.00
June 21.....	18,420.00
July 10.....	206,477.50
July 26.....	184,987.50
Aug. 17.....	426,465.00
Aug. 19.....	29,730.00
On hand.....	11,255.00
	<u>2,308,585.00</u>
Total pending collection.....	8,815.00
Which is distributed as follows:	
40 per cent on \$1,400.....	\$560.00
75 per cent on \$2,900.....	2,175.00
95 per cent on \$6,400.....	6,080.00
	<u>8,815.00</u>

If a new loan is to be floated the department of finance is gladly prepared to continue in the fulfillment of this duty.

The former treasurer, in his report for last year, referring to the subscriptions to the first liberty loan, stated: "Although comparatively small in total amount, the \$600,000 worth of liberty loan bonds bought by the Porto Rican people means much more as an expression of loyalty to the American Government than can be measured in dollars and cents," and I wish to state now that this expression of loyalty on the part of the Porto Rican people, which has been shown in so many other directions during the present war, is still more eloquent from the fact that they have purchased liberty

loan bonds to the amount of \$5,369,050, which distributed among the island's population represents a quota of over \$4 per capita, a more than splendid showing considering the small size of the island and prevailing war conditions.

*Red Cross.*—The department of finance has also given its earnest assistance to the Porto Rico Chapter of the American Red Cross, the treasurer of Porto Rico having been appointed treasurer of the chapter.

The total Red Cross receipts during the year 1917-18 amount to \$79,583.37, and the total expenditures to \$33,369.48, giving a cash balance of \$46,213.89 at the close of the year. Following is a condensed statement of cash receipts and expenditures during the past fiscal year:

	Receipts.	Expenditures.	Surplus.
Wool fund.....	\$3,475.97	\$483.85	\$2,992.12
Refugee garments.....	802.48	332.43	470.05
Memberships.....	38,886.00	15,580.77	23,305.23
Hospital garments.....	5,584.45	4,169.17	1,415.28
Screens fund.....	15.00	.....	15.00
Surgical dressings.....	8,049.71	3,314.68	4,735.03
General fund.....	22,019.76	9,488.58	12,531.18
Civilian relief.....	500.00	.....	500.00
Dependent families of soldiers and sailors.....	250.00	.....	250.00
<b>Total.....</b>	<b>79,583.37</b>	<b>33,369.48</b>	<b>46,213.89</b>

#### CLOSING REMARKS.

As it was expected, with the enforcement of prohibition and the laws enacted by the last legislature affecting the department of finance, the work of this office has been doubled, and although no provision has been made to increase the personnel, satisfactory results have been obtained, due to the spirit of cooperation and efficiency shown by the employees. In addition to the demands of the service, the war has imposed new duties upon these men, and it is worthy of notice and praise the patriotism shown by them in accepting their new duties. The central office personnel, as well as the collectors of internal revenue of the 76 municipalities of the island, have played an active part in the propaganda for the second war fund and liberty loans, many collectors being members of the local boards, without neglecting their current official duties. I would not close this report without expressing my appreciation of their loyal cooperation.

Respectfully submitted.

JOSE E. BENEDICTO,  
Treasurer of Porto Rico.

TABLE NO. 1.—*Estimate of insular revenue cash receipts for year ending June 30, 1919.*

Customs.....		\$370,000.00
Property taxes, insular proportion:		
Estimate of total assessment for the fiscal year 1918-19.....	\$249,000,000.00	
One-tenth of 1 per cent, insular tax.....	249,000.00	
Nine-tenths of 1 per cent of the total increase.....	555,000.00	
		804,000.00
Excise taxes:		
Distilled spirits in medicines.....		6,000.00
Cigars, domestic.....	\$345,000.00	
Cigars exported to United States.....		725,000.00
		1,070,000.00
Cigarettes, domestic.....	714,000.00	
Cigarettes exported to United States.....	15,000.00	
		729,000.00
Patent medicines.....		50,000.00
Perfumery.....		15,000.00
Cosmetics, lotions, etc.....		5,000.00
Arms and ammunition.....		8,000.00
Playing cards.....		7,600.00
Matches.....		37,000.00
Smoking tobacco.....		5,000.00
Internal-revenue licenses.....		130,000.00
Opium licenses.....		600.00
Malt beverages—		
Imported.....	\$28,000.00	
Domestic.....	17,000.00	
		45,000.00
Wines, imported.....		13,600.00
Brandy, imported.....		6,000.00
Alcohol, domestic.....		1,000.00
From war taxes—		
On cigars.....	\$390,000.00	
On cigarettes.....	7,200.00	
		397,200.00
Probable receipts to be collected under Act No. 30, 1917.....		126,000.00
Quaranty stamps—		
Cigars, domestic.....	\$44,000.00	
Cigars, exported.....	84,000.00	
Leaf tobacco, exported.....	14,000.00	
		142,000.00
Miscellaneous.....		370,000.00
		3,164,000.00
Inheritance taxes.....		40,000.00
Telegraph and telephone receipts.....		94,000.00
Court fines.....		41,000.00
Harbor and dock fees.....		25,000.00
Interest on loans to municipalities and school boards.....		75,000.00
Interest on bank deposits.....		70,000.00
Income tax:		
Federal law: On the basis of income from January to December, 1917, and the rate of 2 per cent established by act of Oct. 3, 1917.....	\$490,000.00	
Insular law: Probable income in accordance with Act No. 59.....	700,000.00	
		1,190,000.00
Proportion of municipal income for sanitation.....		119,000.00
Miscellaneous.....		65,000.00
Total.....		6,067,000.00

TABLE No. 2.—Consolidated report of organized banks in operation in Porto Rico at the close of business June 30, 1918.

	American Colonial Bank of Porto Rico.	Banco de Puerto Rico en Liquidación.	Banco Comunal de Puerto Rico.	Banco Popular de San Juan.	Banco Territorial y Agrícola.	Bank of Nova Scotia.	The National City Bank of New York (San Juan).
<b>RESOURCES.</b>							
Immediately available assets:							
Bonds (pledged to secure Insular and Federal deposits).....	\$1,090,648.45		\$80,000.00		\$120,000.00		
Bonds (unpledged).....	386,333.60		133,060.00	\$16,000.00	5,400.00		\$150.21
Stock investments.....	142,215.00				211,067.00		
Reserve fund in bank—							
Bills, legal tender.....	1,078,881.00		463,467.00	3,108.00	428,900.00	264,737.00	136,500.00
Bills, Spanish Bank.....	5.00		270.00				
Gold coin.....	45,900.04	500.00	18,742.50	3,458.50	89,540.00	700.00	88.04
Silver dollars.....	17,172.00		108,513.00	116.00	48,210.00	15.00	15.00
Fractional coin.....	80,196.45		28,150.45	1,034.00	6,991.78	12,107.83	789.55
Clearing-house items.....	118,216.24		148,800.46	3,265.07	99,794.20	117,210.07	13,632.90
Other checks and cash items.....	165,228.99	2,150.00	234,843.34	621.09	56,060.55	17,885.71	2,173.96
Balances with banks and bankers—							
In Porto Rico.....	136,913.23	14,968.00		129,472.14	84,240.09	9,578.77	12,891.79
In the United States.....	1,494,021.13		383,947.22		848,175.66		149,118.78
In foreign countries.....	26,017.21		38,342.66		62,225.28		30,446.29
Balances with other correspondents—							
In Porto Rico.....	44,838.79		220,394.85		40,428.31		
In foreign countries.....			10.00				
Loans—							
Secured by collateral.....	1,000,476.47		31.55		1,999.53		
Secured by real estate.....	21,060.00						
Personal securities.....	2,365,786.05						
Overdrafts.....	7,813.13						
Real estate—							
Bank building.....	124,600.85		74,000.00		80,000.00		
Other real estate.....	2,557.30		87.19		3,358.72		
Furniture and fixtures.....	41,671.75	60.00	14,089.78		24,789.06		
Current expenses.....	27,384.30						
Taxes paid.....							
Interest paid.....							
Cash short account.....	219.88						
Other assets (not included under the foregoing heads).....	14,917.23	60,000.00	40,984.44	4,030.25	8,261.52	10,035.00	
<b>Total.....</b>	<b>8,534,074.09</b>	<b>77,678.00</b>	<b>4,890,915.52</b>	<b>528,111.53</b>	<b>5,025,335.02</b>	<b>3,374,802.33</b>	<b>390,630.89</b>

## LIABILITIES.

LIABILITIES.				
Liabilities to shareholders:				
Capital stock paid in.....	400,000.00	13,374.13	750,000.00	50,000.00
Reserve fund.....	400,000.00	8,102.00	85,000.00	43,000.00
Undivided profits.....	190,993.51		128,082.75	2,645.23
Dividends unpaid.....	31,598.00	789.00	9,269.00	312.00
<b>Deposits:</b>				
Liabilities to the public—				
Individual deposits, subject to check.....	4,759,819.80	11,307.94	2,094,633.02	146,653.91
Demand certificates of deposit.....	239,671.75	1,616.77	32,447.10	5,232.20
Time certificates of deposit.....	188,166.14		262,399.17	
Certified checks.....	23,632.25		62,331.42	95.70
Cashier's checks.....	46.00		62,337.73	
Savings deposits.....	750,080.80		450,367.32	258,505.59
<b>Government deposits—</b>				
Insular government deposits.....	1,438,305.70		178,000.00	
Federal Government deposits.....	66,440.64			
<b>Due to other banks and bankers—</b>				
In Porto Rico.....			11,189.82	
In the United States.....				
In foreign countries.....				
<b>Due to other correspondents—</b>				
In Porto Rico.....			104,058.20	
In the United States.....			8,505.44	
In foreign countries.....				
<b>Profit accounts—</b>				
Bank rents.....	932.10			
Interest accounts.....	44,737.40		16,128.10	
Exchange account.....				
Commission account.....			7.95	
Premium account.....				
Others.....			1,082.90	
<b>Notes issued.</b>				
Mortgage bonds issued.....			38,792.00	805,825.00
Bills payable.....				
Taxes accrued.....				
Interest accrued.....				
Cash over account.....				
<b>Other liabilities (not included under the foregoing heads).</b>				
<b>Total.....</b>	8,534,074.09	77,673.00	4,860,915.62	528,111.53
				5,025,335.02
				2,374,802.33
				369,630.89
				147.61
				928.59
				20,838.25
				4,616.70
				4,956.00
				2,525.00
				344.76
				13,405.49
				9,352.98
				128,498.54
				45,921.43
				2,326,490.81
				646,862.31
				240,771.20
				777,612.47
				20,000.00
				129,084.03
				5,723.46

TABLE No. 2.—Consolidated report of organized banks in operation in Porto Rico at the close of business June 30, 1918—Continued.

	Caja de Economías y Préstamos Cabo Rojo.	Caja de Economías y Préstamos San Germán.	Banco de San Germán.	Banco de Ponce.	Crédito y Ahorro Ponceño.	Crédito y Ahorro Popular de Yauco.	The Royal Bank of Canada.	Total.
<b>RESOURCES.</b>								
Immediately available assets:								
Bonds (pledged to secure insular and Federal deposits):								
Bonds (unpledged):								\$1,413,567.25
Stock investments:								642,852.67
Reserve fund in bank—								398,282.00
Bills, legal tender:								
Bills, Spanish Bank:								\$1,328,965.00
Gold coin:								4,027,751.00
Silver dollars:								275.00
Fractional coin:								165,403.31
Clearing-house tickets:								183,837.00
Other checks and cash items:								235,116.84
Balances with banks and bankers—								757,795.40
In Porto Rico:								639,582.86
In the United States:								834,589.11
In foreign countries:								3,355,661.63
Balances with other correspondents—								224,394.36
In Porto Rico:								
In the United States:								327,628.21
In foreign countries:								1,728.08
Loans—								
Secured by collateral:								
Secured by real estate:								5,731,175.42
Personal securities:								1,832,997.61
Overdrafts:								9,889,269.88
Real estate—								83,506.10
Bank building:								295,407.25
Other real estate:								25,414.01
Furniture and fixtures:								57,076.02
Current expenses:								59,921.77
Taxes paid:								6,861.85
Interest paid:								1,442.92
Cash short account:								219.88
Other assets (not included under the foregoing heads):								680,610.12
<b>Total.</b>	202,344.83	290,278.89	342,461.52	1,071,702.27	1,650,506.13	134,021.16	5,653,182.88	32,015,045.06





TABLE No. 3.—*Transactions in Porto Rico by insurance companies in the calendar year 1917.*

## A. FIRE.

Name of company.	Insurance written.	Premiums thereon.	Losses paid in 1917.	Losses incurred in 1917.
Aachen & Munich Fire Insurance Co., Aix-La-Chapelle, Germany.....	\$5,093,591.00	\$10,719.31	\$2,099.80	\$2,099.80
Baloise Fire Insurance Co., Bale, Switzerland.....	3,305,387.79	11,469.48	3,789.90	3,789.90
British America Assurance Co., Toronto, Canada..	6,523,453.55	16,991.14	2,039.80	2,039.80
Commercial Union Assurance Co. (Ltd.), London, England.....	5,366,697.37	26,766.00	3,500.00	.....
Guardian Assurance Co. (Ltd.), London, England..	2,179,878.00	12,343.60	5,007.00	3,138.00
Hamburg-Bremen Fire Insurance Co., Hamburg, Germany.....	3,495,353.84	10,778.21	5,461.90	4,939.55
Hartford Fire Insurance Co., Hartford, Conn.....	1,792,728.85	5,509.27	.....	.....
Home Insurance Co., New York.....	10,515,914.46	30,224.00	4,132.50	4,132.50
Lancashire Insurance Co. (Ltd.), Liverpool, England	1,637,600.00	9,548.53	330.15	330.15
Liverpool, London & Globe Insurance Co. (Ltd.), Liverpool, England.....	1,660,033.00	11,765.12	509.16	509.16
L'Union de Paris, Paris, France.....	1,232,860.00	9,834.37	2,140.16	2,140.16
The Magdeburg Fire Insurance Co., Magdeburg, Germany.....	1,595,703.00	7,016.15	981.13	981.13
North British & Mercantile Insurance Co., London, England.....	38,189,541.63	60,908.93	5,374.05	302.50
Nord-Deutsche V. G., Hamburg, Germany.....	8,500.00	122.50	.....	.....
North German Insurance Co., Hamburg, Germany..	2,259,062.78	10,030.68	6,482.50	7,273.28
Northern Assurance Co., London, England.....	14,634,823.00	46,068.02	35.72	35.72
Norwich Union Fire Insurance Society, Norwich, England.....	2,997,846.50	20,471.38	295.48	295.48
Palatine Insurance Co. (Ltd.), London, England..	1,401,785.00	11,174.00	509.16	509.16
Phoenix Assurance Co. (Ltd.), London, England..	2,579,336.43	10,906.62	466.88	.....
The Prussian National Insurance Co., Stettin, Germany.....	2,169,440.00	6,999.66	.....	.....
Royal Exchange Assurance, London, England.....	4,864,797.00	24,580.66	7,029.84	7,029.84
Royal Insurance Co., Liverpool, England.....	12,575,525.67	23,134.47	122.45	122.45
The Western Assurance Co., Toronto, Canada.....	3,938,386.66	25,570.46	3,000.00	3,000.00
Yorkshire Insurance Co. (Ltd.), York, England.....	2,408,170.00	18,063.79	.....	.....
Total.....	132,456,415.53	420,939.35	53,244.58	42,605.58

## B. MARINE.

British & Foreign Marine Insurance Co. (Ltd.), Liverpool, England.....	\$2,778,737.00	\$18,007.47	\$3,414.72	\$3,414.72
Commercial Union Assurance Co. (Ltd.), London, England.....	1,549,541.15	12,262.50	12,324.61	.....
Hartford Fire Insurance.....	516,608.67	2,933.14	.....	.....
Mannheim Insurance Co., Mannheim, Germany.....	4,065,207.61	18,466.82	7,503.07	7,927.07
Nord-Deutsche Insurance Co., Hamburg, Germany..	5,136,363.08	25,251.13	1,856.35	1,856.35
Royal Exchange Assurance Corporation.....	1,383,263.00	4,737.21	.....	.....
Royal Insurance Company (Ltd.), Liverpool, England.....	8,690,926.00	27,654.34	3,139.28	3,139.28
Total.....	24,120,616.51	109,312.61	28,238.03	16,337.42

TABLE NO. 3.—*Transactions in Porto Rico by insurance companies in the calendar year 1917—Continued.*

## C. LIFE.

Name of company.	Policies in force Dec. 31, 1916.		Policies written, re- vived, etc., in 1917.		Discontinued by death, lapse, surrender, maturity, etc., in 1917.	
	Num- ber.	Amount.	Num- ber.	Amount.	Num- ber.	Amount.
The Imperial Life Assurance Co. of Canada.	22	\$41,000.00	.....	.....	2	\$4,000.00
Manufacturers' Life Insurance Co., To- ronto, Canada.	412	844,354.00	156	\$312,500.00	61	125,500.00
The Mutual Life Insurance Co. of New York.	79	100,883.00	.....	.....	7	11,911.00
New York Life Insurance Co., New York, N. Y.	1,299	1,959,575.00	1	2,000.00	68	114,525.00
Sun Life Assurance Co. of Canada, Mon- treal, Canada.	1,026	2,791,226.00	220	34,661,365.00	102	253,064.00
Total.....	2,838	5,737,038.00	377	34,975,865.00	240	509,020.00

Name of company.	Policies in force Dec. 31, 1917.		Annuities in force, annual payments.		Gross premiums paid.
	Number.	Amount.	Number.	Amount.	
The Imperial Life Assurance Co. of Canada.	20	\$37,000.00	.....	.....	\$2,243.45
Manufacturers' Life Insurance Co., Toronto, Canada.	506	1,030,354.00	.....	.....	57,132.80
The Mutual Life Insurance Co. of New York.	72	88,972.00	.....	.....	4,418.70
New York Life Insurance Co., New York, N. Y.	1,232	1,847,050.00	2	\$482.00	78,667.22
Sun Life Assurance Co. of Canada, Mon- treal, Canada.	1,144	3,199,507.34	.....	.....	174,692.25
Total.....	2,974	6,202,883.34	2	482.00	317,154.42

## D. ACCIDENT.

Name of company.	Insurance written.	Premiums thereon.	Losses paid in 1917.	Losses incurred in 1917.
Employers' Liability Assurance Corporation (Ltd.) London, England.....	\$193,500.00	\$689.75	\$50.00	\$50.00

## E. FIDELITY.

Name of company.	Insurance written.	Premiums thereon.	Losses paid in 1917.	Losses incurred in 1917.
American Surety Co. of New York, New York, N.Y.	\$953,550.27	\$3,625.82	\$39.47	\$39.47
Fidelity & Deposit Co. of Maryland, Baltimore, Md.	2,947,738.86	13,575.15	1,449.01	426.06
National Surety Co. of New York, New York, N.Y.	3,709,076.00	13,127.70	2,054.04	2,054.04
Employers' Liability Assurance Corporation (Ltd.) London, England.....	10,000.00	50.00	.....	.....
Total.....	7,620,365.13	30,378.67	3,542.52	2,519.57

TABLE NO. 3.—*Transactions in Porto Rico by insurance companies in the calendar year 1917—Continued.*

## F. LIABILITY.

Name of company.	Insurance written.	Premiums thereon.	Losses paid in 1917.	Losses incurred in 1917.
Employers' Liability Assurance Corporation (Ltd.) London, England.....	( <sup>1</sup> )	\$44,691.80	\$11,148.15	\$11,873.15

## G. PROPERTY DAMAGE.

Employers' Liability Assurance Corporation (Ltd.) London, England.....	\$505,000.00	\$10,475.27	\$2,109.76	\$2,619.76
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## H. HURRICANE.

North British & Mercantile Insurance Co., London, England.....	\$3,166,106.00	\$27,985.76	.....	.....
Northern Assurance Co.....	260,400.00	2,324.99	.....	.....
Phoenix Assurance Co. (Ltd.), London, England....	53,900.00	370.57	.....	.....
Total.....	3,480,406.00	30,681.32	.....	.....

## I. STEAM BOILER.

Employers' Liability Assurance Corporation (Ltd.), London, England.....	\$70,000.00	\$3,795.00	.....	.....
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## J. HEALTH.

Employers' Liability Assurance Corporation (Ltd.), London, England.....	\$15,000.00	\$132.50	.....	.....
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## K. MARINE AND WAR.

St. Paul Fire & Marine Insurance Co., St. Paul, Minn.....	\$6,189,657.77	\$29,173.33	\$3,797.60	\$3,797.60
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<sup>1</sup> Amount of "Insurance written" not reported.

TABLE No. 4.—*Total assessed value of real and personal property, by municipalities, for the fiscal year 1917-18.*

[Corrected to Dec. 31, 1917.]

Municipality.	Real property.	Personal property.	Total.	Municipality.	Real property.	Personal property.	Total.
Adjuntas.....	\$2,009,400	\$143,990	\$2,153,390	Lares.....	\$2,570,794	\$160,449	\$2,731,243
Aguada.....	1,981,363	161,683	2,143,046	Las Marias.....	1,571,075	40,825	1,611,900
Aguadilla.....	2,049,309	476,020	2,525,329	Las Piedras.....	946,025	91,357	1,038,382
Agua Buenas.....	712,236	106,701	817,937	Loiza.....	3,219,424	216,783	3,436,207
Albionito.....	1,286,040	126,066	1,412,106	Luquillo.....	1,131,889	62,904	1,194,793
Anasco.....	2,183,732	148,164	2,332,716	Manatí.....	2,957,514	584,553	3,542,067
Arecibo.....	8,329,473	1,954,491	10,283,964	Maricao.....	1,561,590	651,500	1,626,740
Arroyo.....	1,926,513	247,106	2,173,619	Maunabo.....	917,965	108,840	1,026,805
Barceloneta.....	2,349,494	502,352	2,851,846	Mayaguez.....	7,041,013	2,579,646	9,620,659
Barranquitas.....	622,330	44,720	667,050	Moca.....	947,038	50,990	998,028
Barros.....	1,023,300	63,790	1,086,990	Morovis.....	859,506	73,870	933,376
Bayamon.....	4,412,567	823,695	5,236,262	Naguabo.....	2,152,901	225,512	2,378,413
Cabo Rojo.....	2,526,332	282,701	2,809,033	Naranjito.....	480,618	54,510	535,128
Caguas.....	4,903,056	1,239,485	6,142,541	Patillas.....	1,666,538	239,535	1,906,073
Camuy.....	1,805,833	162,336	1,968,169	Pedueñas.....	1,230,454	128,550	1,359,004
Carolina.....	3,014,392	323,126	3,337,518	Ponce.....	15,005,305	4,712,622	19,717,927
Cayey.....	2,871,624	387,005	3,258,629	Quebradillas.....	918,051	112,159	1,030,210
Celba.....	859,185	76,414	935,599	Rincon.....	980,730	127,800	1,108,530
Ciales.....	1,943,502	190,310	2,133,812	Rio Grande.....	2,009,177	227,445	2,236,622
Cidra.....	1,045,412	85,638	1,131,050	Rio Piedras.....	4,743,287	704,309	5,447,496
Coamo.....	1,670,960	228,910	1,899,870	Sabana Grande.....	834,672	120,690	955,362
Comerio.....	1,974,424	129,503	2,103,927	Salinas.....	4,723,995	504,602	5,228,597
Corozal.....	720,590	101,150	821,740	San German.....	2,649,025	507,480	3,156,505
Culebra.....	151,270	68,780	220,050	San Juan.....	24,737,322	14,052,851	38,790,173
Dorado.....	1,443,282	174,338	1,617,620	San Lorenzo.....	1,093,961	209,800	1,303,461
Fajardo.....	3,680,853	863,940	4,544,793	San Sebastian.....	1,903,408	197,588	2,100,996
Guanica.....	4,114,960	801,036	4,915,996	Santa Isabel.....	3,514,070	290,070	3,805,040
Guayama.....	4,926,482	773,275	5,699,757	Toa Alta.....	918,765	108,813	1,027,578
Guayanilla.....	1,812,940	227,025	2,039,965	Toa Baja.....	2,297,772	184,149	2,481,921
Guaynabo.....	1,066,144	102,139	1,168,283	Trujillo Alto.....	1,096,733	157,446	1,254,179
Gurabo.....	1,422,703	106,784	1,529,487	Utusado.....	3,057,030	247,985	3,305,015
Hatillo.....	1,494,713	133,622	1,628,335	Vega Alta.....	1,492,371	403,122	1,895,493
Hormigueros.....	1,039,199	110,680	1,149,879	Vega Baja.....	2,375,542	246,709	2,622,251
Humacao.....	3,933,826	679,297	4,613,123	Vieques.....	3,475,380	422,291	3,897,671
Isabela.....	1,347,699	161,025	1,508,724	Villalba.....	769,116	94,384	863,500
Jayuya.....	1,333,260	90,540	1,423,800	Yabucoa.....	3,110,543	298,334	3,408,877
Juana Diaz.....	3,974,233	312,800	4,286,733	Yauco.....	2,808,055	470,360	3,278,415
Juncos.....	2,012,392	239,396	2,251,688				
Lajas.....	1,983,638	265,011	2,248,649				
				Total.....	201,728,745	42,201,867	243,930,612

TABLE No. 5.—*Tabulation of assessed value of real property, by municipalities and classes.*

[Corrected to Dec. 31, 1917.]

Municipality.	Urban.			Rural.								
	Lots.	Improve- ments.	Total.	Cane.	Coffee.	Tobacco.	Pine- apples.	Oranges.	Coconuts.	Minor fruits.	Pasture.	Timber brush.
Adjuntas.....	\$38,722	\$101,788	\$140,510	\$35,390	\$1,032,915					\$132,205	\$162,815	\$232,332
Aguada.....		63,360	63,360	572,306	87,115				\$138,200	56,554	475,873	5,250
Aguadilla.....	207,278	514,922	722,200	422,470	14,125		\$5,500		170,830	81,410	504,375	18,690
Agua Buenas.....	4,340	74,250	78,590	6,850	177,204					58,715	273,899	44,851
Albionito.....	3,545	223,532	227,070	2,931	178,300					53,930	409,423	23,545
Añasco.....	9,128	225,092	234,190	876,292	367,497	174,175			75,140	33,644	200,910	33,718
Arasco.....	482,519	1,298,598	1,769,117	2,650,904	175,755	52,420	12,270	\$11,375	12,438	149,055	1,178,990	295,113
Arroyo.....	83,032	212,270	324,302	732,940	24,848				38,180	4,310	230,257	10,837
Barceloneta.....	36,446	124,144	148,590	771,250	98,130				6,200	17,254	137,033	115,408
Barraquitas.....	2,450	73,460	75,910	48,730	35,710		34,945	78,790		55,715	283,365	88,015
Barros.....	60	51,140	51,200	265	248,100					127,890	397,065	152,550
Bayamon.....	712,254	1,100,120	1,812,374	356,632	103,773		17,305	129,015	60	52,718	991,524	66,054
Cabo Rojo.....	550	251,250	251,800	984,450	12,384		15,340	400	156,695	107,405	712,987	109,581
Caguas.....	86,639	1,408,461	1,495,100	855,405	44,490				8,840	74,820	601,933	96,318
Camuy.....	1,905	104,615	106,420	507,745	67,210	3,510				32,319	21,142	21,142
Carolina.....	1,815	216,145	217,960	683,945	9,470		12,625		84,525	86,380	407,131	56,105
Cayey.....	151,207	457,877	639,084	238,796	251,360	498,027				1,900	252,490	13,185
Cidra.....	6,135	26,285	32,420	467,260						112,405	201,195	168,141
Coamo.....	24,070	202,270	226,340	7,220	1,028,185	9,715				64,490	386,515	22,935
Clides.....	1,550	52,170	53,720	27,485	306,765				47,700	830,420	146,265	
Comerio.....	95	325,075	325,170	245,300	84,175				41,920	298,927	26,803	
Corozal.....	5,700	141,830	147,530	550	216,713					60,785	328,601	82,781
Culebra.....	966	71,564	72,530	8,835	112,770	11,465					134,035	
Dorado.....	670	9,160	9,830				2,250	106,400		5,040	427,068	65,225
Fajardo.....	710	56,010	56,720	516,517	935			6,150	13,280	6,650	454,359	15,020
Guayama.....	51,860	578,750	630,610	946,079					11,320	27,805	235,335	77,730
Guaynabo.....	500	45,680	46,180	1,051,830	300				24,900	19,228	897,987	103,767
Guayanilla.....	20,067	1,021,023	1,051,090	2,040,810	101,210				15,400	78,635	162,445	135,071
Guaynabo.....	20,189	91,671	111,860	505,500	231,355	1,345			2,000	6,485	354,126	20,050
Gurabo.....	17,447	40,355	57,802	381,482	33,902	5,650	2,650	54,630		24,250	413,617	34,653
Hadillo.....	500	125,080	125,580	447,265	19,165	142,040				79,715	762,785	24,670
Hormigueros.....	1,116	58,454	59,570	383,480	24,870	64,380	3,400		4,990	20,500	90,087	17,775
Humacao.....	1,660	25,260	26,920	571,209	32,645			1,000	160,590	9,110	735,996	15,320
Isabela.....	107,847	641,723	749,570	1,096,793	1,375			200	72,015	167,818	571,360	111,065
Jayuya.....	20,458	106,817	127,275	131,685	685,990	2,950				61,960	159,840	165,485
Juana Diaz.....	7,960	65,150	72,510	22,870	2,950					26,955	631,944	140,286
Juncos.....	17,960	224,860	242,820	2,253,465	179,125	90,882				36,526	327,430	49,745

Lajas.....	1,000	46,320	47,320	777,926	13,065	1,200	33,000	600	1,100	114,340	845,265	29,270
Lares.....	12,550	277,720	291,070	1,700	1,476,497	200	.....	.....	.....	31,784	415,322	45,266
Las Marias.....	1,340	19,400	20,790	11,700	885,545	900	.....	2,940	.....	21,985	795,727	132,476
Las Piedras.....	1,844	72,376	74,040	362,121	3,021	1,000	.....	.....	.....	3,810	886,099	12,066
Leca.....	1,645	77,335	79,080	1,001,120	100,960	.....	.....	.....	363,075	21,866	958,010	25,274
Loquillo.....	25,740	46,040	637,280	848,552	7,780	.....	.....	.....	70,150	6,269	286,951	119,016
Manati.....	46,112	612,680	637,280	848,552	19,505	.....	44,815	129,110	22,470	40,208	124,680	184,000
Maricao.....	1,020	69,370	71,390	317,715	6,300	.....	.....	.....	3,000	11,260	101,280	46,402
Martinez.....	873,151	2,823,597	3,708,748	84,030	801,683	1,135	.....	.....	144,471	111,135	471,864	112,946
Mayaguez.....	3,042	37,410	37,890	163,592	207,110	.....	.....	.....	.....	56,035	323,478	116,940
Moca.....	3,171	37,185	57,540	84,030	197,645	50	.....	.....	.....	34,320	363,278	104,874
Moravia.....	31,715	188,915	220,128	859,890	70,470	14,120	.....	.....	.....	64,965	614,383	26,524
Naguabo.....	31,715	28,015	28,525	1,040	109,457	64,005	.....	.....	28,490	26,275	163,980	62,268
Negundo.....	530	123,940	124,470	518,900	199,835	.....	.....	.....	10,075	43,449	402,068	132,700
Pedraza.....	530	61,283	73,410	422,170	109,835	300	.....	.....	.....	59,630	234,985	132,700
Petillas.....	2,890,453	4,672,614	7,563,067	2,580,500	781,655	340	.....	5,400	.....	43,379	1,307,114	203,405
Ponce.....	12,127	100,010	100,870	2,580,500	58,320	1,075	.....	.....	.....	96,345	305,564	19,235
Quebradillas.....	1,200	43,960	45,160	278,042	7,295	.....	.....	.....	.....	168,030	120,000	19,955
Rincon.....	13,090	123,060	136,150	643,365	30,283	.....	.....	.....	.....	14,225	735,640	64,871
Rio Grande.....	439,550	831,629	1,421,179	647,964	22,467	250	.....	.....	.....	51,015	1,246,426	25,995
Sabana Grande.....	44,252	125,018	159,075	175,228	73,185	1,000	.....	.....	.....	68,411	211,770	48,287
Salinas.....	10,718	538,002	576,720	1,775,800	14,585	13,515	.....	.....	.....	109,080	1,021,130	92,655
San German.....	10,214,631	12,621,146	22,835,777	933,045	278,130	.....	.....	.....	.....	2,700	481,955	37,802
San Juan.....	1,320	199,300	200,630	108,060	70,965	94,705	.....	.....	.....	71,263	348,856	97,464
San Lorenzo.....	9,524	149,579	159,103	101,645	638,373	.....	.....	.....	.....	74,080	596,247	56,560
San Sebastian.....	28,155	76,830	104,965	2,294,550	.....	.....	.....	.....	.....	30,220	533,620	11,740
Santa Isabel.....	11,875	99,740	111,315	226,930	11,353	4,305	.....	.....	.....	7,275	333,880	30,636
Tos Alta.....	7,677	102,608	110,265	854,455	200,200	.....	.....	.....	.....	18,920	425,470	53,243
Tos Baja.....	53,751	24,914	25,300	177,117	4,875	.....	.....	.....	.....	13,415	407,214	5,010
Trujillo Alto.....	53,751	380,794	434,545	58,090	1,149,970	26,140	.....	.....	.....	48,096	870,140	172,620
Utuado.....	19,370	82,880	83,620	331,331	12,225	.....	.....	.....	.....	13,415	169,052	88,249
Vega Alta.....	19,370	198,195	217,565	708,265	10,487	5,200	.....	.....	.....	26,130	412,160	109,304
Vega Baja.....	15,325	228,115	243,440	1,035,655	.....	.....	73,560	101,060	35,750	.....	874,760	128,635
Vieques.....	210	10,560	10,770	57,760	219,046	.....	.....	.....	.....	30,105	300,005	64,430
Villalba.....	5,400	221,840	227,240	1,831,061	6,810	600	.....	.....	.....	7,860	488,726	37,360
Yabucoa.....	2,648	802,202	825,850	1,480,220	600,095	52,885	.....	.....	.....	157,575	265,905	183,520
Total.....	10,981,224	37,227,990	54,200,214	43,756,906	13,900,912	2,284,169	424,690	1,195,545	2,027,871	3,556,488	35,881,928	5,675,408



# REPORT OF THE TREASURER.

405

Leiza.....	22,535	2,400	1,851,020	73,650	800	10,588	6,648	1,000	2,800	54,968	1,983,838
Lera.....			1,971,988	219,667			4,271			307,826	2,670,794
Las Mercedes.....			1,371,673	178,612						178,612	1,746,075
Las Piedras.....			1,798,945	18,870			642			184,040	1,946,925
Leiza.....	11,100	100	2,436,644	508,500			4,566	126,366	200	703,700	3,219,434
Luquillo.....	4,260	4,260	974,123	26,408			13,769	117,347		111,477	1,131,889
Manati.....	1,874	15,742	1,793,663	336,650			4,903	67,367		651,061	2,957,514
Maricao.....		400	1,281,265	336,650			16,305	87,180		212,045	1,561,580
Martinez.....			4,096,568	182,320						350,007	4,747,083
Moravia.....	3,912	6,875	2,322,325	17,132			4,150			1,008,640	7,041,013
Moravia.....		1,260	839,355	615,040			3,600	8,000	5,100	77,033	947,033
Moravia.....		1,100	753,640	3,000				15,000	1,145	43,326	859,506
Moravia.....		100	753,640	153,950			5,513	146,865		372,051	2,152,901
Moravia.....	6,576	8,790	1,560,724	56,668			9,965			32,854	1,666,538
Naguabo.....	1,790	6,585	421,239	30,921			1,883	50		382,491	1,230,454
Pedillas.....	1,070	13,100	1,159,577	93,243			4,998	30,000		76,344	1,230,454
Pedillas.....		24,020	1,080,700	88,744			7,600			1,006,305	15,006,305
Ponce.....	10,280	12,470	5,099,313	404,737			120,000	90,080	603,448	2,342,928	15,006,305
Quebradillas.....		6,815	725,886	45,539			8,130	24,546	3,380	91,546	918,051
Rincon.....		1,100	499,927	390,000			6,090	1110,987		446,643	880,730
Rio Grande.....	22,580	9,330	1,697,124	53,586			18,129	415,498		1,126,648	4,743,287
Rio Piedras.....	3,280	5,500	2,195,400	220,108			10,700			89,096	2,284,026
Sabana Grande.....			608,041	62,626			25,000			214,563	1,063,660
Salinas.....	23,090	9,075	2,947,775	197,550			806,114		2,000	1,720,358	24,737,822
San German.....		1,965	1,857,742	172,688						97,268	1,948,061
San Juan.....	3,310	4,000	18,660	5,505			8,000	40,000		287,400	1,948,061
San Lorenzo.....		4,385	795,738	48,212			9,000	37,500	660	514,346	3,514,070
San Sebastian.....	8,450	26,350	1,456,905	116,510			3,215	43,368		90,196	918,766
Santa Isabel.....	40	8,155	2,894,740	107,633			5,837	84,182		560,407	2,287,772
Tos Alta.....	7,500	38,212	1,627,080	115,152			4,117	315,513	2,522	360,807	1,085,733
Tos Baja.....		1,920	680,428	57,156				8,000		746,190	3,067,030
Trujillo Alto.....		740	2,325,765	238,719			2,830	42,280		41,816	1,492,371
Urutubo.....	4,620	5,568	686,353	63,040			9,001	67,028		679,871	2,275,583
Vega Alta.....	4,910		2,651,065	75,899			900	144,000		1,180,960	3,765,583
Vega Baja.....	1,500		2,676,290	164,700						78,476	3,114,143
Vieques.....		3,580	67,626	31,430			5,438			78,476	3,114,143
Villalba.....	700		2,067,752	171,790			19,000	91,000		280,110	2,388,063
Yabucoa.....		18,585	1,752,065	141,610							
Yauco.....											
Total.....	300,298	589,948	109,634,163	8,453,787	19,988,645	910,268	2,324,728	941,832	4,343,681	942,327	37,885,368
											201,738,745



TABLE 6.—Number of acres, by municipalities and classes, for the fiscal year 1917-18.  
[Corrected to Dec. 31, 1917.]

Municipality.	Cane.	Coffee.	Tobacco.	Pineapples.	Oranges.	Cocoanuts.	Minor fruits.	Pasture.	Timber and brush.	Marsh lands.	Other lands.	Total.
Adjuntas.	444	11,413				457	3,387	6,062	21,766		348	43,419
Aguada.	2,969	990				722	1,253	11,250	165	13	110	17,257
Aguadilla.	3,796	171		55			1,492	14,111	3,617	45	11	22,541
Agua Buenas.	53	2,002	236				1,667	11,270	3,696		44	18,778
Albion.	38	2,267	2,108				1,663	12,268	5,563		64	20,778
Anasco.	4,809	4,789			48	276	1,183	10,364	5,522		156	24,472
Arrebo.	1,957	2,459	867	109	646	57	2,984	24,960	29,928	241	954	76,342
Arroyo.	2,478	2,773				10	109	4,131	9,808	275	980	20,438
Barrancuela.	4,414	695	45	264	368	21	1,520	12,023	6,231	10	1,371	21,511
Barranquitas.	7	625	61				1,372	18,266	11,174		1,976	30,384
Barrón.	2,840	3,495	93	172	702	28	2,122	20,083	4,139	4	1,337	31,271
Cafo Rojo.	7,564	122	3	122	2	538	1,798	20,574	9,646	510	1,347	31,854
Caguas.	5,440	523	2,536			45	1,976	15,512	4,566	23	1,903	27,944
Camay.	8,973	846	28	75		569	1,787	19,089	5,179	2,226	114	28,562
Carolina.	4,445	107					2,669	15,359	5,179		4	31,947
Cayey.	1,745	3,152	3,945			7	49	7,015	1,326	584		13,047
Ceballos.	3,816						3,236	8,773	15,496		5,215	41,706
Ciales.		8,784	77				1,960	14,022	1,798			22,518
Cidra.	299	3,700	3,731				1,232	32,504	11,249			46,074
Cosamo.		3,089					1,391	10,263	6,532			18,297
Corosal.	9	963	3,056				1,459	15,263	6,423		1	25,129
Corzal.	124	965	1,117					6,423		779		18,297
Culebra.												
Donado.	3,024	10		15	440	133	128	6,212	4,819		265	13,688
Fajardo.	6,336						19	5,212	4,410	31	631	13,688
Guanica.	4,281		6		56	49	735	10,592	1,903		199	19,795
Guayama.	7,447						618	8,407	6,623	207	1,368	21,632
Guayayula.	1,857	1,964	15			94	1,963	20,208	8,881		1,308	30,715
Guaynabo.	3,379	409	64	21	322	52	1,171	6,616	11,033		1,037	23,007
Guayabo.	3,393	347	874			10	627	10,280	1,018	123	138	15,935
Hastillo.	3,718	357	721	34			1,497	9,999	2,549		20	17,779
Hormigueros.	5,834	278				28	1,500	16,702	2,215	16	1,643	26,884
Humacao.	7,440	659			5		271	16,414	397	8		27,894
Isabela.	1,567				1	1,899	8,461	11,025	14,847	755	728	31,929
Jayuya.	334		36				1,711	6,464	12,871			28,775
Juana Diaz.	8,117	7,408					1,268	17,696	7,096		1,404	37,126
Juncos.	3,064	2,067					2,702	7,707	3,698		207	16,688
Lajas.	6,353	80	786		3	5	1,206	22,502	1,917		6	30,291
Lares.	64	113	8	198			1,206	20,780	3,976	2,283		33,876
Las Marias.	127	10,568	11		28		1,624	12,229	7,707			31,311



TABLE 7.—Average value per acre, by municipalities and classes, for the fiscal year 1917-18.

[Corrected to Dec. 31, 1917.]

Municipality.	Cane.	Coffee.	Tobacco.	Pineapples.	Oranges.	Coconuts.	Minor fruits.	Pasture.	Timber and brush.	Marsh lands.	Other lands.	Total.
Adjuntas.....	\$79.64	\$80.50				\$38.03		\$28.85	\$12.05		\$5.55	\$37.48
Aguada.....	191.47	87.99				45.13		42.30	31.82	\$93.07	34.73	77.07
Aguadilla.....	111.59	82.61		\$100.00		\$283.77		35.74	11.55	10.89	75.45	55.36
Agua Buenas.....	129.25	88.52	\$89.21			296.27		24.30	12.47		1.85	31.00
Albano.....	79.22	78.65	82.63					33.34	11.57		5.38	41.56
Alfonso.....	182.22	76.73			\$247.39	272.26		26.77	13.36		35.35	68.96
Arecibo.....	180.47	71.47	60.46	112.57		213.33		50.04	9.86	39.92	38.23	61.42
Arroyo.....	264.13	90.35				354.18		47.89	13.45		11.05	111.86
Barceloneta.....	174.56	98.52	101.12	132.36		200.52		45.28	11.97	14.00	14.99	61.86
Barros.....	36.42	73.25	44.07					23.55	14.15		4.90	24.28
Bayamon.....	71.79	101.26	200.00	100.61		30.00		20.09	13.55	10.00	7.10	23.22
Cabo Rojo.....	125.61	128.60		125.73		206.78	44.23	49.43	15.72		38.05	56.70
Caguas.....	130.15	101.26				291.07	44.21	42.61	12.68	22.76	6.57	50.53
Camuy.....	157.24	85.07	122.22			150.00	31.91	34.65	10.07		12.24	56.25
Caguas.....	127.84	79.45	125.36			196.44	37.97	38.80	9.83	34.49	12.90	46.83
Carolina.....	153.87	88.51		172.94		148.55	41.07	32.37	10.83		10.00	74.21
Cayey.....	136.84	79.75	120.53			228.57	32.65	35.99	9.94	10.46		50.96
Ceballos.....	122.44						34.11	22.94	10.86		5.93	57.09
Ciales.....	95.00	117.17	126.17				32.58	27.56	12.85			37.38
Cidra.....	91.93	85.71	82.22				38.71	25.54	13.00			33.41
Coamo.....	51.11	87.60	70.91				26.11	30.14	10.38		400.00	33.15
Corozal.....	71.25	116.98	98.00				41.68	21.53	12.99		8.15	24.33
Culebra.....								27.81	20.80			27.78
Dorado.....	170.81	93.50		150.00		99.85	36.38	42.04	14.79	29.04	15.46	83.47
Fajardo.....	152.47					231.02	84.21	82.90	8.42	8.73	37.11	74.17
Guánica.....	245.09		50.00				37.83	27.99	11.73	6.02	22.20	66.88
Guayama.....	274.05	86.95				294.89	31.11	44.44	11.08		16.51	80.81
Guayanilla.....	272.21	117.79	89.66			296.15	40.06	23.92	12.28		10.19	49.19
Guaynabo.....	112.89	82.69	88.25	126.19		200.00	37.92	34.44	19.70	10.97	11.77	64.22
Hurdo.....	132.52	86.23	162.51				85.67	48.07	13.99		10.00	60.81
Hatillo.....	103.14	86.06	89.29	100.00		163.92	55.14	46.07	11.13	26.87	11.60	60.91
Hormigueros.....	143.98	117.43					23.43	23.00	44.77	25.00		100.79
Humacao.....	147.42	72.81				108.07	33.62	41.84	9.74			74.11
Isabela.....	84.02	82.16				166.16	57.23	34.72	17.45			38.99
Jayuya.....	68.11	87.68	81.94				27.03	42.56	12.87	9.82	13.38	53.58
Juncos.....	277.34	75.44	115.63				56.91	42.86	13.11		451.80	53.15
Lajas.....	129.34	112.70	150.00	169.70		200.00	29.32	37.80	20.41	9.87	12.46	51.02
Loreto.....	48.82	114.38	100.00				24.32	19.89				50.72
Los Moros.....	92.13	87.61	81.83		83.57		35.29	26.00	17.83			49.81

Las Piedras.....	128.89	83.00	100.00	.....	.....	278.86	23.23	26.73	18.11	50.00	44.42
Lajas.....	183.23	94.08	.....	.....	.....	283.86	31.06	30.67	12.23	10.04	70.55
Lequillo.....	332.16	73.53	.....	.....	.....	99.57	30.31	30.63	20.64	14.06	91.21
Manati.....	219.79	94.86	87.26	102.06	200.55	71.63	37.50	31.83	8.76	11.89	55.93
Maricao.....	108.73	.....	.....	.....	.....	.....	44.42	21.83	.....	10.00	55.93
Mayaguez.....	146.80	57.79	66.76	.....	.....	202.67	44.42	21.83	28.91	152.78	30.02
Moca.....	160.86	89.31	50.00	.....	.....	.....	31.70	21.83	.....	100.00	30.01
Merced.....	148.50	112.88	79.77	.....	.....	.....	34.97	21.83	.....	100.00	30.01
Naguabo.....	147.50	112.88	102.67	.....	143.76	212.54	38.73	20.20	10.59	12.12	36.33
Patillas.....	159.35	101.67	.....	.....	.....	247.41	37.71	27.82	14.57	19.87	26.25
Pedraza.....	228.45	104.17	75.00	.....	300.00	200.00	37.13	26.09	10.00	6.49	38.17
Ponce.....	273.57	104.17	37.73	.....	.....	135.00	37.04	48.68	9.99	8.94	71.54
Quebradillas.....	111.29	86.24	97.73	.....	.....	267.49	59.14	50.60	13.82	10.38	64.45
Rincon.....	166.29	86.24	.....	.....	150.00	288.71	32.63	23.60	8.71	18.33	63.61
Rio Grande.....	165.05	67.94	.....	.....	.....	199.17	62.21	41.34	9.83	8.23	83.49
Rio Piedras.....	145.05	86.20	125.00	151.89	204.45	300.00	40.72	19.74	8.99	26.26	26.24
Sabana Grande.....	94.73	77.99	100.00	.....	.....	283.85	39.59	39.93	13.32	2.51	71.96
Salinas.....	264.23	84.25	118.55	.....	.....	281.25	37.73	31.91	14.30	200.00	174.00
San German.....	140.62	.....	.....	.....	.....	201.43	67.00	207.51	15.60	.....	87.60
San Juan.....	.....	75.36	49.35	.....	.....	.....	26.12	21.05	8.52	11.19	23.92
San Lorenzo.....	87.92	90.76	.....	.....	.....	.....	27.38	21.42	13.19	.....	34.06
San Sebastian.....	78.65	.....	.....	.....	.....	330.36	55.71	54.86	15.50	14.15	137.26
Santa Isabel.....	297.00	.....	119.58	173.17	188.17	.....	55.71	54.86	40.00	23.91	44.65
Tos Alta.....	161.19	97.87	100.00	130.04	233.38	23.08	39.92	20.47	18.15	27.37	110.09
Tos Baja.....	199.45	100.00	100.00	110.91	196.76	.....	47.86	43.20	32.23	33.68	54.69
Trujillo Alto.....	114.34	108.72	.....	.....	.....	.....	43.20	43.21	17.40	4.46	31.15
Utuado.....	101.91	94.03	78.03	.....	.....	.....	28.42	20.52	9.85	7.30	39.88
Vega Alta.....	141.23	79.74	100.00	125.00	213.31	96.45	27.21	25.61	9.81	10.29	38.75
Vega Baja.....	176.71	98.01	104.00	120.06	202.44	117.64	39.82	40.76	20.30	6.00	65.90
Vieques.....	105.91	.....	.....	.....	.....	103.62	.....	.....	.....	.....	26.97
Villalba.....	96.91	105.11	.....	.....	.....	.....	34.72	21.47	14.34	6.24	66.74
Yabucoa.....	172.02	80.07	200.00	.....	.....	284.26	21.65	26.02	12.91	.....	42.19
Yauco.....	263.58	109.65	81.87	.....	.....	219.35	37.25	26.76	15.20	4.22	.....
General average.....	170.64	94.58	94.42	129.24	204.61	216.03	37.57	35.81	12.39	12.74	83.12

TABLE No. 8.—Total assessed value of personal property, by municipalities and classes, for the fiscal year 1917-18.

[Corrected to Dec. 31, 1917.]

Municipality.	Money.	Merchandise, raw material, furniture, and fixtures in establishments.	Work cattle.	Other cattle.	Horses, mules, and donkeys.	Other animals.	Carts drawn by animals.	Automobiles.	Coaches.	Portable track.	Machinery.	Rolling stock.	Vessels.	Hives.	Other property.	Total personal property.
Adjuntas.....	\$4,632	\$80,713	\$7,060	\$14,141	\$26,869		\$2,465	\$3,300	\$390		\$1,700	\$340		\$1,610	\$750	\$143,990
Aguada.....	11,224	16,000	42,455	11,920	11,035	\$225	17,005	18,100	240	\$3,000	8,200	23,563				161,563
Aguadilla.....	16,500	330,555	25,520	25,520	11,740		17,605	18,420	450		2,200	25,100	\$10,510		1,005	476,620
Aguas Buenas.....	430	50,216	15,720	27,415	8,065	15	1,210	2,000	380							105,701
Albionito.....	2,172	65,097	14,760	22,122	16,011		702	2,050	115		1,264			1,580	633	126,506
Alasco.....	3,483	80,562	11,045	14,368	7,292	60	2,955	1,780	550	2,500	3,940	19,149			360	148,964
Arcebo.....	173,616	1,020,503	176,200	65,735	42,351		29,165	68,845	4,105		40,602	141,291	4,100	990	196,988	1,954,491
Arroyo.....	38,127	91,668	42,210	6,345	10,758		5,949	13,600	1,860	200	40,925	17,800	13,750	250	3,344	247,106
Bacardi.....	2,719	71,066	86,654	21,051	13,045		6,850	10,910	570	320	15,461	141,981			181,625	502,352
Barranconeta.....		17,680	3,405	15,475	6,220		160	1,550	50							44,720
Barros.....	450	23,220	1,650	22,665	14,465			1,770			60			580		63,760
Bayamon.....	38,663	395,989	44,719	92,641	16,951	408	8,033	53,970	1,715	3,600	35,877	77,475	36,740		14,094	823,665
Cabo Rojo.....	1,366	75,060	66,765	61,945	15,110		11,750	7,600	260		5,700	33,475	2,230	280	300	232,701
Caguas.....	63,476	735,960	116,866	66,245	39,022		9,262	47,273	2,399		24,874	101,616		750	29,351	1,239,455
Canuny.....	2,294	38,160	37,010	31,045	19,810		8,260	2,080	1,475	400	3,440	17,792				162,536
Carolina.....	21,777	63,282	40,725	120,094	19,529		8,518	14,980	925	7,200	135	29,821	180		990	322,126
Cayey.....	12,351	216,748	27,257	31,406	31,406		2,600	30,750	540		4,863			400	16,810	387,036
Ceballos.....	3,340	9,330	16,460	12,346	3,999		2,420	1,190	510		1,980	26,464			308	76,414
Cidra.....	1,060	112,700	8,010	24,230	29,645		1,070	6,400	70						4,663	190,310
Cosamo.....	1,265	27,568	23,535	21,880	8,220		730	2,130	160						100	86,638
Cruz.....	3,940	64,280	32,570	72,130	45,455		2,580	14,060	1,400		1,200			1,150	50	228,910
Culebra.....	1,083	72,069	12,790	16,125	10,740		173	9,670	100		1,874				1,169	129,503
Culebra.....		26,060	10,960	37,435	10,135		620	10,900			8,100			1,000	10	101,150
Culebra.....						180							700			
Dorado.....	7,510	1,543	23,000	45,750	8,670		2,370	11,900	480	300	1,800	62,178		100	2,000	176,780
Florida.....	1,790	200,793	333,375	27,770	21,705	30	16,520	20,770	340		33,500	163,698	26,700		51,468	863,940
Guama.....	216,000	400,620	70,740	57,692	19,203		15,525	29,590	2,370	19,000	64,900	284,416				861,036
Guayama.....	6,870	400,977	113,260	59,046	29,705	10	15,525	29,590	2,370	19,000	26,570	13,419		500	14,568	773,275
Guayanilla.....	6,033	35,077	32,640	29,198	12,242		2,640	3,350	760	5,000	2,973	3,243	78,400			102,025
Guaynabo.....	1,732	24,735	24,735	21,928	6,462		3,000	6,100	70	6,000				40	400	76,724
Guaynabo.....	1,310	28,739	17,780	24,664	8,025		6,000	9,580	170	6,000	520	16,345				123,692
Hatillo.....	300	16,090	34,115	45,155	15,955		6,905	2,650	300	14,131	19,088	17,112		80	100	135,693
Hermanos.....	1,000	4,530	84,230	6,510	4,813		3,170	33,150	390	14,131	2,269	32,068		100	100	111,892
Humacao.....	27,592	217,811	75,070	35,953	13,085		3,170	33,150	390	14,131	2,269	32,068	11,280	660	14,776	679,297
Yabala.....		41,110	34,355	34,735	17,400	410	5,435	4,550	1,630	161,464	2,350	21,670				16,625

Jayuya.....	1,921	45,909	6,689	12,555	17,895	2,420	250	400	140	20,300	2,370	1,110	90,540
Juana Diaz.....	1,705	90,610	70,000	55,070	28,130	5,560	7,320	1,635	4,200	26,370	250	1,110	312,500
Juncos.....	1,220	17,533	77,533	29,248	9,290	9,560	10,580	1,265	2,700	11,025	50	4,200	239,396
Lajas.....	1,469	72,490	72,490	75,519	12,524	9,855	10,580	270	5,490	41,831	6,975	1,707	265,011
Lares.....	9,158	77,124	4,660	17,519	35,896	1,530	3,950	280	1,580	1,450	1,015	91,357	40,825
Las Marias.....	785	9,680	1,000	17,035	18,708	1,565	710	85	3,200	22,397		480	216,783
Las Piedras.....	8,795	29,300	29,300	29,037	4,915	1,150	850	100	15	35,995	110		62,904
Ledra.....	1,000	39,160	28,520	72,806	17,415	3,015	6,150	150	4,960	90	50	165	584,553
Loquillo.....	846	8,585	8,585	32,907	3,235	8,815	1,960	220	15,000	33,066		9,142	65,150
Manatí.....	42,269	208,022	40,965	49,715	15,255	5,240	28,555	620	15,000	8,380	3,190		108,840
Maricao.....	1,125	21,835	53,190	3,485	16,265	6,150	9,550	100	1,970	2,400	4,120	127,166	2,579,646
Mayaguez.....	655	60,960	32,480	12,945	4,390	9,495	62,199	3,901	1,000	37,243	1,490	330	30,990
Moca.....	1,800	14,140	13,920	26,045	7,705	2,815	9,410	210	1,000	180	735	5,981	225,512
Morovis.....	3,199	70,710	41,030	39,225	12,435	1,870	2,570	350			1,500	500	54,310
Naguabo.....	21,880	15,015	81,050	28,399	17,344	9,170	5,150	100	3,500	740		2,415	238,535
Naranjito.....	1,052	14,578	36,020	24,535	14,925	3,320	4,450	340	5,600	14,750		8,980	128,550
Patillas.....	387,402	3,032,987	214,420	73,391	62,195	34,984	123,823	9,932	26,400	113,660	850	502,458	4,712,022
Ponce.....	1,313	29,640	23,060	16,080	10,355	4,065	4,040	800	1,000	2,000	100	11,831	112,150
Quebradillas.....	49	41,233	24,279	9,900	6,915	2,910	3,000	230	300	3,810	500		127,445
Rincon.....	58,080	44,725	60,296	51,862	17,073	5,655	30,440	3,340	29,744	8,950	300	108,790	704,200
Rio Grande.....	14,119	205,945	71,235	21,825	9,080	4,105	6,900	1,020	2,400	13,210	200	1,720	120,660
Sabana Grande.....	2,531	36,710	30,710	120,395	32,890	8,970	15,580	1,620		1,470	1,250	6,357	607,000
Salinas.....	1,820	252,884	48,690	34,080	22,365	10,453	17,000	1,370		89,642	65,310	3,908,180	14,002,800
San German.....	7,601,035	31,290	31,065	15,175	15,072	7,263	29,139	355		3,530	405	11,652	397,588
San Juan.....	1,966,550	80,018	31,290	48,475	12,940	2,170	4,840	110		16,900	27,018	72,750	108,813
San Lorenzo.....	11,220	72,553	21,290	31,065	21,000	2,735	1,810	660	8,500	16,900	2,080	50	184,149
San Sebastian.....	678	27,960	60,050	41,255	16,955	7,000	1,810	625	19,000	4,128	200	517	157,448
Santa Isabel.....	4,476	28,567	25,600	35,800	8,459	4,210	10,200	205		210	405	270	247,955
Ton Toa.....	200	133,000	16,005	31,563	42,975	4,060	2,080	360		38,948	4,705	208,501	403,122
Trujillo Alto.....	9,005	103,000	15,900	34,570	8,052	3,690	5,750	100	9,000	12,451		2,750	246,700
Vieques.....	4,813	100,829	41,400	14,190	9,575	3,690	11,370	320		5,290	47,205	2,750	422,291
Vega Baja.....	5,757	83,719	151,221	26,535	9,575	13,840	22,464	990		11,620	18,220	2,480	94,384
Vieques.....	1,180	38,735	14,225	16,848	18,065	1,360	22,464	220		180		14,490	298,334
Villalba.....	7,383	116,616	38,727	45,068	17,035	2,641	6,850	500		1,250	5,080	27,350	470,360
Yabucoa.....	53,010	258,700	28,655	27,010	23,820	4,190	17,600	1,110	3,620	6,180			
Total.....	3,707,258	19,788,937	3,265,640	2,626,931	1,252,652	4,950	1,204,038	62,716	389,509	760,971	381,476	54,575	5,739,544
													42,201,867



Junco.....	1,338	57.95	1,978	19.72	277	40.93	46.64	24	440.88	4	96.25	10	5.00
Lake.....	1,262	58.23	2,302	24.49	314	39.89	38.59	14	382.14	4	45.00	1,475	4.75
Leas.....	1,055	44.87	642	20.80	752	47.10	46.20	1	355.00	1	75.00	1,171	9.45
Las Marias.....	31	51.61	189	26.08	860	21.75	26.90	2	850.00	1	100.00		
Las Piedras.....	640	45.53	1,120	20.40	193	32.48	31.94	1	100.00	3	60.00		
Loias.....	662	50.62	1,213	22.97	631	32.79	32.15	17	381.75	5	44.00		
Luquillo.....	183	46.24	3,163	21.35	119	27.18	27.50	6	331.67	14	44.29		
Manati.....	886	46.24	2,303	21.15	437	34.91	36.90	52	159.71	3	63.33	674	4.58
Maricao.....	18	53.33	22.34	22.34	286	56.87	37.50	6	406.53	6	60.84		
Mayaguez.....	897	46.30	627	19.53	154	28.51	31.68	5	406.53	60	63.35	707	5.83
Mayaguez.....	503	46.86	1,024	21.08	606	42.05	38.13	153	350.00	4	52.50	572	2.60
Moca.....	272	45.17	1,861	20.79	201	34.80	34.75	2	514.00				
Moravia.....	282	49.36	1,354	18.72	378	32.89	34.00	5	427.73	6	58.33	260	2.85
Naguabo.....	856	47.92	1,797	18.83	255	32.91	37.40	22	735.71	1	100.00	300	5.00
Naranjito.....	201	44.06	1,065	18.87	184	33.05	38.00	7	321.43	18	66.56		
Patillas.....	1,408	57.56	1,263	22.50	525	33.04	47.51	7	445.00	7	45.57		
Pedernales.....	1,736	53.04	1,108	22.14	376	39.06	45.12	10	432.95	126	78.98	170	5.00
Ponce.....	4,044	53.02	2,975	24.42	1,208	51.49	46.40	286	445.00				
Quebradillas.....	490	47.12	683	24.67	268	38.64	46.44	9	448.80	16	55.62		
Rhomon.....	363	66.88	439	22.55	146	47.36	38.35	8	375.00	4	50.00		
Rio Grande.....	848	52.74	2,643	22.81	367	39.18	36.84	14	415.00	7	45.71		
Rio Piedras.....	1,213	58.73	2,151	24.11	419	40.75	38.13	82	371.21	48	66.58	26	2.69
Sabana Grande.....	541	56.76	966	22.59	238	38.15	40.24	14	492.86	7	62.86	70	4.29
Salinas.....	1,953	49.52	5,097	23.66	894	36.79	50.39	46	403.91	18	56.67		
San German.....	1,969	49.17	1,611	21.16	526	42.52	38.75	39	453.84	8	60.00	250	6.00
San Juan.....	50	52.00	2,997	51.09	222	67.89	55.02	560	520.25	23	56.54		
San Lorenzo.....	754	41.41	2,568	18.96	465	27.82	31.00	10	495.00	11	32.27	100	4.06
San Sebastian.....	500	55.46	1,865	18.35	542	38.80	41.74	12	403.33	2	55.00	819	4.94
Santa Isabel.....	1,197	50.16	1,509	17.34	346	46.20	46.91	27	437.41	13	50.77		
Tos Alta.....	409	41.72	1,827	19.69	260	32.53	33.93	8	478.75	12	43.75	40	5.50
Tos Baja.....	538	45.88	1,819	24.25	183	46.00	33.95	21	496.67	57	36.06	50	5.00
Trujillo Alto.....	384	41.68	1,514	20.57	308	26.95	33.79	8	178.00	6	45.00	20	2.50
Utuado.....	322	49.22	1,779	19.43	190	33.27	45.11	11	186.09	2	40.00	1,155	4.13
Vega Alta.....	717	57.74	1,798	17.78	242	33.45	31.90	35	324.86	6	50.00		
Vega Baja.....	454	49.25	1,201	32.09	256	33.50	33.53	17	381.41	16	61.87		
Vega Grande.....	2,862	52.29	1,942	24.96	441	38.60	47.23	31	430.00	8	44.00	739	3.57
Vieques.....	2,872	48.71	2,750	22.46	367	55.85	44.84	1	400.00	8	56.50		
Villalba.....	683	55.45	2,042	23.05	487	38.69	41.28	3	463.10	8	52.43	36	2.50
Yabucoa.....	566	50.68	1,211	22.30	566	41.86	46.56	38	463.10	42	56.43		
Total.....	62,025	52.67	117,462	22.36	31,318	39.99	41.60	2,591	464.70	1,059	69.78	11,590	4.71



TABLE No. 10.—*Report, by nationality, of all the real estate used for the purposes of agriculture and held either directly or indirectly by corporations, partnerships, or individuals in holdings in excess of 500 acres in Porto Rico.*

Nationality.	Number of part- nerships.	Property description and value.							Grand total value.
		Land.				Buildings, machinery, and other structures.			
		Owned.		Leased.		Total.	Owned.	Leased.	
		Number of acres.	Value.	Number of acres.	Value.				
<b>INDIVIDUALS AND PARTNERSHIPS.</b>									
United States of America.....	271	290, 112	\$17, 472, 990	67, 687	\$5, 817, 011	357, 799	\$23, 290, 001	\$3, 190, 268	\$26, 910, 043
Spain.....	109	89, 429	4, 356, 128	35, 520	2, 002, 906	124, 949	6, 359, 034	919, 107	7, 330, 865
France.....	21	26, 044	1, 352, 735	5, 248	716, 610	31, 292	2, 069, 345	742, 575	2, 823, 165
Other nationalities.....	6	3, 343	71, 810	1, 139	62, 350	4, 482	134, 160	4, 450	140, 320
Americans in partnership with Spaniards.....	21	26, 467	2, 115, 255	10, 396	669, 310	37, 363	2, 784, 565	113, 225	2, 916, 480
Americans in partnership with citizens of various nationalities.....	5	9, 965	1, 004, 887	2, 000	323, 630	12, 565	1, 328, 517	895, 641	2, 200, 628
<b>Total.....</b>	<b>432</b>	<b>445, 360</b>	<b>26, 373, 906</b>	<b>123, 090</b>	<b>9, 591, 817</b>	<b>568, 450</b>	<b>35, 965, 622</b>	<b>5, 835, 206</b>	<b>42, 321, 491</b>
<b>CORPORATIONS.</b>									
United States of America, Incorporated:									
In the United States.....	13	33, 633	3, 477, 618	46, 123	5, 471, 698	79, 776	8, 949, 126	7, 428, 010	16, 814, 868
In Porto Rico.....	31	58, 038	6, 708, 402	56, 549	6, 150, 297	117, 587	12, 853, 699	11, 635, 742	24, 578, 699
Foreign (Incorporated).....	1	142	28, 390	441	35, 600	583	63, 990	762, 732	827, 532
<b>Total.....</b>	<b>45</b>	<b>91, 833</b>	<b>10, 209, 410</b>	<b>106, 113</b>	<b>11, 657, 405</b>	<b>197, 946</b>	<b>21, 866, 815</b>	<b>19, 826, 484</b>	<b>42, 219, 099</b>
<b>Grand total.....</b>	<b>477</b>	<b>537, 193</b>	<b>36, 583, 215</b>	<b>229, 203</b>	<b>21, 749, 222</b>	<b>766, 396</b>	<b>57, 832, 437</b>	<b>1, 046, 345</b>	<b>84, 540, 590</b>

TABLE 11.—Statement of income tax levied on individuals and corporations, Feb. 13, 1918, to June 30, 1918.

Number of separate assessments.	Class of levy.	Rate (per cent.).	Total.
1213	Normal.....	2	\$188,650.04
	Additional on net income:		
119	\$20,000 to \$40,000.....	1	8,515.66
23	\$20,000 to \$60,000.....	2	8,444.57
17	\$20,000 to \$80,000.....	3	13,942.01
5	\$20,000 to \$100,000.....	4	7,631.97
8	\$20,000 to \$150,000.....	5	27,279.59
1	\$20,000 to \$200,000.....	6	5,644.71
1	\$20,000 to \$250,000.....	7	7,788.68
17	Retained at the source from individuals.....	2	267,897.23
	Corporations' earnings:		3,596.36
118	\$1 to \$50,000.....	2	23,522.51
15	\$50,000 to \$100,000.....	2	22,562.78
11	\$100,000 to \$200,000.....	2	27,216.51
12	\$200,000 to \$500,000.....	2	74,108.46
4	Over \$500,000.....	2	74,115.18
	Total.....		493,012.08

TABLE 11A.—Comparative statement of the normal and additional income taxes and amounts withheld at the source, assessed against individuals and corporations for the years 1915, 1916, and 1917, as per assessments made on June 30 of the years 1916, 1917, and 1918.

Class of levy.	1915			1916			1917 <sup>1</sup>		
	Number of separate assessments.	Rate per cent.	Total.	Number of separate assessments.	Rate per cent.	Total.	Number of separate assessments.	Rate per cent.	Total.
Normal tax.....	871	1	\$46,064.19	925	2	\$140,242.01	1,213	.....	\$188,650.04
Retained at the source from individuals.....			5,588.99			8,800.39	17	2	3,596.36
ADDITIONAL ON NET INCOME.									
From \$20,000 to \$40,000.....				130	1	15,554.77	119	1	8,515.66
From \$20,000 to \$50,000.....	66	1	9,550.92	47	2	16,562.19	23	2	8,444.57
From \$40,000 to \$60,000.....	14	2	4,321.85	33	3	14,623.94	17	3	13,942.01
From \$60,000 to \$80,000.....	6	3	1,212.17	17	4	9,687.51	5	4	7,631.97
From \$75,000 to \$100,000.....				10	5	16,094.27	8	5	27,279.59
From \$80,000 to \$100,000.....	1	4	1,851.76	4	6	5,933.14	1	6	5,644.71
From \$100,000 to \$150,000.....				1	7	3,411.46	1	7	7,788.68
From \$150,000 to \$200,000.....									
From \$200,000 to \$250,000.....									
CORPORATIONS' EARNINGS.									
From \$1 to \$50.....	109	1	10,438.92	85	2	18,286.79	118	2	23,522.51
From \$50,001 to \$100.....	11	1	7,021.43	11	2	14,747.41	15	2	22,562.78
From \$100,001 to \$200.....	4	1	5,646.91	11	2	31,076.24	11	2	27,216.51
From \$200,001 to \$500.....	4	1	10,012.38	11	2	55,341.56	12	2	74,108.46
From \$500,001 to more than \$500.....	3	1	18,900.46	3	2	57,503.70	4	2	74,115.18
Total.....			120,618.98			408,415.78			493,012.08

<sup>1</sup> The tax assessed up to June 30, 1918, for the year 1917, to the amount of \$493,012.08, shows an increase of 20.71 per cent, as compared against the amount of \$408,415.48 assessed up to June 30, 1917, for the year 1916. In addition to the tax assessed for the year 1917, as shown in the above statement there remains a total tax of \$79,724.81 part of which was assessed during the month of July, the balance to be assessed during the present month.

TABLE 12.—Comparative statement showing sources of excise taxation in Porto Rico, the quantity of merchandise, in the case of specific and the value thereof in the case of ad valorem tax levied, tax paid during the past four fiscal years, and the amount of such tax collected, including licenses and miscellaneous.

Sources of taxation.	Unit of tax.	1914-15		1915-16		1916-17		1917-18		Decrease over fiscal year 1916-17.		Increase compared with fiscal year 1916-17.	
		Quantity or value.	Tax.	Quantity or value.	* Tax.	Quantity or value.	Tax.	Quantity or value.	Tax.	Quantity or value.	Tax.	Quantity or value.	Tax.
Distilled spirits:	Liters	1,886,067	\$943,033.50	1,782,947	\$891,473.50	1,905,803	\$952,901.46	418,845	\$209,423.21	1,486,958	\$743,478.25		
Domestic	do	60,072	30,036.02	43,849	21,924.49	47,566	23,782.43	30,500	15,280.46	17,066	8,501.97		
Imported	do	8,985	2,518.75	15,359	4,300.70	23,708	6,638.31	28,498	7,979.56			4,790	\$1,341.25
Contained in medicines, cosmetics, lotions, toilet waters.													
Beer:	do	556,507	40,038.77	612,805	43,211.69	847,609	61,006.36	704,742	50,775.53	142,864	10,220.83		
Domestic	do	828,150	82,815.05	897,336	89,723.69	823,457	82,345.64	345,696	34,569.64	477,761	47,776.00		
Imported	do	483,638	48,363.85	543,723	54,372.37	607,111	60,711.04	182,011	18,201.08	425,100	42,509.96		
Wine	do	4,438	2,219.15	3,478	1,739.20	2,034	1,016.80	2,143	1,071.20			109	54.40
Spartling wines	do	1,421	1,421.25	3,567	3,567.90	4,507	4,507.00	4,226	4,225.47				
Champagne	do	104,422,083	304,279.25	109,130,296	324,532.59	125,242,544	346,523.73	108,427,085	321,325.97	16,815,459	25,197.76		
Cigars	Each	339,080,165	678,160.33	308,025,865	616,051.73	349,043,290	698,086.56	392,550,100	725,108.58			13,506,910	27,013.82
Cigarettes	do	895,227.00	14,284.05	888,091.00	13,303.70	8110,251.00	16,537.76	8171,386	17,138.55			861,135	600.82
Perfumery	Value	\$81,148.10	38,114.81	\$426,093.00	42,609.36	\$637,372.00	63,737.26	\$659,334	65,933.46			\$21,962	2,196.20
Patent medicines	do											\$23,868	2,386.81
Cosmetics, lotions, toilet waters, etc.	do	\$10,027.70	1,002.77	\$56,202.00	5,620.22	\$95,086.50	9,508.65	\$118,955	11,895.46			\$2,760	1,103.85
Arms and ammunitions	do	\$22,222.77	8,880.11	\$24,340.70	8,536.30	\$21,162.50	8,465.02	\$23,922	9,568.87			750	187.50
Cards	Packs	29,472	7,368.00	27,707	6,926.75	40,896.00	12,474.00	50,646	12,661.50			140,049	28,009.81
Matches	Gross box	185,293	37,940.76	258,530	51,706.02	141,698.00	28,333.58	281,717	56,343.39				
Prepared smoking and fine cut chewing tobacco	Ounces	225,219	6,756.58	191,862	5,455.86	187,815.00	5,634.46	162,468	4,873.74	25,357	760.71		
Internal revenue licenses			266,211.75		239,763.00		228,136.00		191,967.25		26,168.75		
Optium licenses			250.36		697.02		684.77		658.62		26.15		
Physicians' licenses													203.00
Miscellaneous													41,443.40
Motor vehicles, tires, etc.	Value		138,121.75		252,384.43		279,956.16		321,599.56			567,091.60	28,354.58
Photographs	do								567,091.60			7,517.60	373.88
Pianos	do								13,998.40			13,998.40	699.92
Flutes	do								20,980.80			20,980.80	1,040.49
Diamonds and other precious stones	do								4.70			4.70	

Guaranteed stamps for Each.....	2,826,725.00	28,267.25	2,826,725.00	28,267.25
Cigars.....				
Guaranteed stamps for leaf tobacco.....	21,332.00	5,332.15	21,332.00	5,332.15
Total collected.....	2,670,915.86	2,890,956.96	2,144,875.04	914,931.91
				108,890.60

TABLE 13.—Average number of licenses issued during the past six fiscal years, with revenue received therefrom.

Years.	Manufacturers.		Wholesale dealers.		Retail dealers.		Billiard tables.		Optum licenses.		Physicians' licenses.		Total.	
	Num-ber. <sup>1</sup>	Amount collected.	Num-ber. <sup>1</sup>	Amount collected.	Num-ber. <sup>1</sup>	Amount collected.	Num-ber. <sup>1</sup>	Amount collected.	Num-ber. <sup>1</sup>	Amount collected.	Num-ber.	Amount collected.	Licenses in force.	Tax received.
1912-13.....	703	\$28,598.50	871	\$45,535.00	19,584	\$191,533.50							21,248	\$275,597.00
1913-14.....	743	31,073.00	716	45,298.50	18,013	188,539.00							17,533	273,440.50
1914-15.....	713	31,127.50	716	45,145.00	14,923	188,171.75							17,530	273,440.11
1915-16.....	690	27,545.00	655	39,145.00	13,002	172,038.00	577	\$5,767.50	613	\$240.35			16,515	240,090.02
1916-17.....	704	27,247.25	743	40,307.00	15,512	165,688.75	505	5,082.50	781	697.02			17,941	228,830.77
1917-18.....	591	19,873.75	1,057	41,832.00	11,648	126,431.50	489	4,895.00	691	684.77	203	\$203.00	14,145	162,838.87

<sup>1</sup> This number represents the average number of licenses in force each quarter throughout each year. The number issued annually is therefore in each instance four times as great as that given.

TABLE 14.—*Taxable articles exported from Porto Rico during the past 5 fiscal years free of tax.*

Article.	1913-14	1914-15	1915-16	1916-17	1917-18	Increase 1917-18 over 1916-17.	Decrease 1917-18 compared with 1916-17.
Alcohol.....liters..	281,125	234,004	676,979	859,436	927,869	68,433	.....
Bay rum.....do.....	318,920	272,325	290,561	395,132	• 175,293	.....	219,839
Alcohol in bay rum.....do.....	173,182	152,142	165,560	215,476	95,971	.....	119,505
Beer.....do.....	17,628	13,907	110,099	180,290	121,373	.....	68,917
Cigars.....number..	150,363,991	174,275,407	189,248,855	210,396,365	181,779,520	.....	28,619,845
Cigarettes.....do.....	6,195,000	12,020,750	11,785,430	9,571,250	6,439,600	.....	3,131,650
Medicines.....do.....	.....	.....	.....	\$4,905.48	\$5,633.99	\$728.51	.....

<sup>1</sup> In connection herewith attention is invited to the statement of leaf tobacco, wherein it will be seen that there was exported from Porto Rico during the fiscal year 1917-18 a total of 181,779,520 cigars, which falls behind the mark of 1916-17 by 28,619,845 cigars, or about 13.6 per cent less than that year. This shortage and that of 3,131,650 cigarettes are principally due to the general strike in the island during the months of October, November, and December, 1917. It will also be noted above that the exportation of alcohol of this fiscal year has exceeded that of previous year by 68,433 liters, which may be attributed to the amount of same exported, with privilege of drawback under the provisions of Act No. 69, approved Dec. 5, 1917. Shipments of medicines have surpassed those of preceding year by \$728.51.

The decrease in exportations of bay rum, alcohol in bay rum, and beer is partly due no doubt to a declining market for such luxuries, and also to the lack during the past year of shipping space available to manufacturers and exporters of such articles.

<sup>2</sup> Value, not quantity.

TABLE 15.—*Statement of leaf tobacco grown and imported into Porto Rico, and of exportation of leaf tobacco and elaboration of cigars for exportation and consumption in Porto Rico during the fiscal year ending June 30, 1918.*

<b>Leaf tobacco:</b>		
Acres planted and cultivated.....	acres..	51,445
Total crop during the year.....	pounds..	25,774,500
Leaf tobacco imported into Porto Rico.....	do.....	2,262,044
Porto Rican leaf tobacco exported.....	do.....	20,102,491
Porto Rican leaf tobacco used in the manufacture of cigars and cigarettes.....	do.....	4,307,630
Imported leaf tobacco used in the manufacture of cigars and cigarettes.....	do.....	871,771
Total amount of leaf tobacco elaborated.....	do.....	5,879,391
<b>Cigars exported:</b>		
Elaborated from Porto Rican leaf tobacco.....	cigars..	114,386,732
Elaborated from a mixture of Porto Rican and imported leaf tobacco.....	do.....	67,287,767
Elaborated from imported leaf tobacco.....	do.....	105,000
Total amount of cigars elaborated for exportation.....	do.....	181,779,519
<b>Cigars consumed in Porto Rico:</b>		
Elaborated from Porto Rican leaf tobacco.....	do....	37,602,994
Elaborated from a mixture of Porto Rican and imported leaf tobacco.....	do....	64,815,452
Elaborated from imported leaf tobacco.....	do....	4,228,239
Total amount of cigars elaborated for consumption in Porto Rico.....	do....	106,646,685
Total amount of cigars elaborated during the year.....	do....	288,426,204

*Guaranty stamps affixed to cigars exported from Porto Rico from July 1, 1917, to Feb. 28, 1918, under the act of Mar. 11, 1915.*

Elaborated from Porto Rican leaf tobacco.....	stamps..	39,417
Elaborated from a mixture of Porto Rican and imported leaf tobacco.....	do.....	36,029
Elaborated from imported leaf tobacco.....	do.....	21
<b>Total.....</b>		<b>75,467</b>

*Guaranty stamps affixed from Mar. 1, 1918, to June 30, 1918, under the act of Dec. 3, 1917.*

	Stamps.	Value.
<b>TO CIGARS EXPORTED FROM PORTO RICO.</b>		
Elaborated from Porto Rican leaf tobacco.....	356,371	\$3,563.71
Elaborated from a mixture of Porto Rican and imported leaf tobacco.....	817,016	8,170.16
Elaborated from imported leaf tobacco.....	None.	.....
<b>Total number and value of stamps.....</b>	<b>1,171,387</b>	<b>11,713.87</b>
<b>TO CIGARS CONSUMED IN PORTO RICO.</b>		
Elaborated from Porto Rican leaf tobacco.....	329,750	3,297.50
Elaborated from a mixture of Porto Rican and imported leaf tobacco.....	1,475,508	14,755.03
Elaborated from imported leaf tobacco.....	84,948	849.48
<b>Total number and value of stamps.....</b>	<b>1,890,201</b>	<b>18,902.01</b>
<b>TO LEAF TOBACCO EXPORTED FROM PORTO RICO.</b>		
<b>Total number and value of stamps.....</b>	<b>24,425</b>	<b>6,106.25</b>

TABLE 16.—Detailed expenditures of municipalities, fiscal year 1917-18.

Purpose.	Current expenses.					Outlays.		Indebtedness.				Addi- tional from special tax.	Addi- tional loans.	Grand total.
	Total.	Salaries super- vision.	Repairs and main- tenance.	Supplies, materials, inciden- tals.	Con- struction and improve- ments.	Property and equip- ment.	Floating.	Funded.						
								Interest.	Princpal.					
		A.	B.	C.	D.	E.	F.	G.	H.		I.	J.		
General government.....	\$408,902.08	\$321,488.96	\$28,746.45	\$33,665.63	\$5,430.78	\$26,333	\$9,710.72			\$429,068.86		\$12,013.97	\$441,082.83	
Executive and finance offices.....	297,298.20	253,062.73	115.00	44,108.47		5,013.33	3,508.94			305,813.47		571.80	306,385.27	
Legal services and costs.....	5,195.68	3,566.66		1,619.12			1,600.05			6,345.73			6,345.73	
Courts.....	84,046.52	33,346.20		7,700.32		7.00	32.50			84,086.02			84,086.02	
Civil register.....	26,271.76	26,042.46		229.30			99.41			26,371.17			26,371.17	
Municipal buildings.....	34,699.80	3,775.00	28,681.45	2,233.35	5,430.78		1,224.26			41,354.84		8,880.10	50,234.94	
Traveling expenses.....	11,412.07	1,665.00		9,716.07			8,685.56			15,097.63		2,582.07	17,679.70	
Fire departments.....	23,976.98	13,374.94		10,602.04		1,172.12				25,146.10		1,228.09	26,374.19	
Health conservation and sanitation.....	274,924.62	186,766.72	620.22	88,537.68	378.81	2,083.86	10,698.04			288,078.32		31,846.13	319,924.45	
Inular supervision.....	113,561.15	113,561.15					7,018.38			120,580.53			120,580.53	
Street cleaning and refuse dis- posal.....	188,922.28	70,682.87		88,235.09		2,088.86	3,110.93			164,122.04		8,830.78	172,952.82	
Street sprinkling.....	10,275.55	144.00		131.55						10,420.55			10,420.55	
Sewage systems.....	800.22	180.00	620.22		378.81		568.73			1,735.76		23,315.36	25,051.11	
Miscellaneous.....	1,368.44	1,198.00		170.44						1,368.44			1,368.44	
Highways.....	313,768.80	31,862.57	138,606.97	143,177.26	43,740.41	372.64	36,870.33			394,550.08		203,115.25	597,665.33	
Streets, sidewalks and plazas.....	99,840.43	21,481.13	47,040.28	1,328.07	33,131.15	372.64	6,493.28			109,840.40		164,078.04	273,918.44	
Street lighting.....	146,536.57	4,136.63	800.00	141,698.94	676.51		80,119.90			177,422.28		52,643.19	230,065.47	
Rural roads.....	97,430.80	6,274.81	90,866.74	156.25	9,633.45		54.15			107,478.40		6,388.02	113,866.42	
Charities.....	451,673.06	222,203.13	1,666.49	227,800.44	2,173.90	5,153.35	22,576.63			481,568.94		28,768.61	510,337.55	
Outdoor poor relief.....	112,981.64	91,638.12		21,323.52			55.00			113,016.64			113,016.64	
Relief stations and hospitals.....	22,262.38	10,680.75	1,666.49	10,515.13		4,040.36	10,028.59			28,634.37		21,072.46	50,706.83	
Dispensaries.....	36,882.45	17,713.68		30,682.45		92.99	11,328.26			48,711.63		4,584.70	53,296.33	
Medicines.....	13,854.07	2,677.37		11,776.70			1,608.76			15,462.91		3,016.73	18,479.64	
Poor in institutions.....	8,336.07	216.00		8,110.14		126.00	185.75			8,531.89		84.72	8,616.61	
Miscellaneous charities.....														

22	Corrections, jails.....	44,732.84	26,555.36	92.84	13,084.64	1,070.99	46.92	17.50		46,471.26	1,124.05	47,595.90
	Education.....	9,894.17	4,399.94		5,494.28		31.40			9,865.57		9,865.57
23	Scholarships.....	2,814.49			2,814.49					2,814.49		2,814.49
24	Libraries.....	6,873.68	4,399.94		2,473.74		31.40			6,905.08		6,905.08
25	Miscellaneous, not obligatory.....	246.00			246.00					246.00		246.00
	Recreation.....	26,644.37	23,415.64		2,227.74		3,011.28	8.00		28,663.65		28,663.65
26	Bands and concerts.....	26,644.37	23,415.63		2,227.74		3,011.28	8.00		28,663.65		28,663.65
27	Celebrations and entertain- ments.....											
28	Miscellaneous.....											
	Municipal property.....	149,373.61	82,492.52	8,926.16	57,965.13	37,450.32	2,742.13	20,178.96		209,740.02	170,653.10	380,393.12
29	Water supply systems.....	67,523.74	33,254.04	7,439.33	26,830.37	1,441.01	722.50	16,223.69		85,911.54	148,925.43	234,836.97
30	Electric light plants.....	19,183.36	4,905.03		14,278.31	2,969.50	1,240.99	1,523.97		25,196.32	9,638.97	34,835.29
31	Piers and docks.....	20,322.71	5,703.00		12,622.11	1,374.14	841.11	21.90		21,244.58	21,244.01	21,244.01
32	Marinas.....	6,372.13	5,682.13	97.06	584.94	31,374.14	268.73	841.11		36,142.58	379.21	36,521.79
33	Meat shops.....	5,443.24	6,383.26	81.66	701.68	1,303.15	433.41	361.72		8,101.83	300.59	8,402.42
34	Slaughterhouses.....	7,738.79	6,373.03	390.51	715.68	2,021.56	433.41	361.72		8,701.83	3,707.59	12,409.42
35	Canteens.....	20,139.49	17,515.03	984.51	2,093.99	349.37	55.50	72.50		21,138.86	12,868.62	34,007.48
36	Animal pounds.....	41.13	41.13	14.71	78.00					136.90	113.46	250.36
37	Theaters.....	869.27	840.00	8.20	111.07					869.27		1,072.75
38	Others.....											
39	Miscellaneous.....	4,443.47	686.00	107.95	3,649.52		50.00	488.30		146,235.53	2,480,682.04	353,398.08
	Total.....	1,707,371.95	912,279.56	178,857.08	616,235.31	90,850.21	19,701.92	100,329.48		2,059,509.33	2,480,682.04	2,721,409.87
40	Indebtedness:											
	Floating.....	81,738.05	7,576.77	5,234.99	68,924.29	11,990.89	6,663.54			100,329.48		100,329.48
41	Funded interest.....									54,873.60		54,873.60
42	Funded, principal.....									86,382.16		86,382.16
	Outlays:											
43	Construction and improve- ments.....	984.46			984.46					984.46		307,901.10
44	Property and equipment.....											26,474.30



TABLE 17.—Comparative statement of receipts of all municipalities in 1916-17 and 1917-18.

Items.	1916-17		1917-18	
	Total.	Ordinary funds.	Total.	Ordinary funds.
<b>GENERAL REVENUES.</b>				
Taxes.....	\$1,455,673.15		\$1,415,863.78	
Property taxes, general funds.....	1	\$1,114,198.21		\$1,102,636.61
Tax on sale and slaughter of meat.....	2	144,498.47		107,042.67
Business licenses.....	3	190,473.06		200,802.77
Dog and other licenses.....	4	6,506.42		5,382.83
Public service enterprises.....		227,045.13		252,607.23
Water supply systems.....	5	186,988.72		208,140.99
Electric light plants.....	6	17,796.92		26,880.67
Piers and docks.....	7	22,259.49		21,206.67
Use of municipal property.....		112,673.54		110,683.89
Sewers.....	8	1,710.41		2,536.51
Markets.....	9	47,377.04		37,152.38
Meat shops.....	10	12,699.26		12,799.72
Slaughterhouses.....	11	10,349.38		15,728.80
Animal pounds.....	12	10,338.64		10,234.31
Cemeteries.....	13	11,538.55		9,623.51
Municipal lots.....	14	2,826.76		1,394.88
Theaters.....	15	1,706.65		2,364.42
Hospitals (pay patients).....	16	6,554.50		9,712.16
Other property.....	17	7,573.35		8,639.11
Miscellaneous.....		22,551.89		22,192.98
Privileges.....	18	3,805.42		1,639.04
Permits.....	19	1,431.42		1,238.53
Fees.....	20	7,373.65		9,687.48
Fines.....	21	3,772.25		190.50
Interest.....	22	8,501.96		8,096.49
Other current receipts.....	23	1,262.19		741.94
Total general revenues.....		1,817,943.71		1,801,347.88
Repayments.....		51,621.51		40,346.28
Maintenance of insular prisoners.....	24	13,489.56		30,285.69
Transportation of patients to asylums.....	25	75.86		233.14
Other repayments.....	26	38,066.09		8,827.55
Receipts not current.....		16,188.19		39,541.79
Sales.....	27	2,760.17		4,167.27
Grants, donations, etc.....	28	4,343.86		19,761.54
Miscellaneous.....	29	9,084.16		15,612.98
Total receipts, ordinary funds.....		1,885,753.41		1,881,235.95
<b>SPECIAL FUNDS.</b>				
Road funds.....		122,884.65		122,421.64
Property tax.....	30			
Loan redemption funds.....		54,025.53		9,060.83
Property tax.....	31			
Interest on redemption funds.....	32			
Loans.....		173,931.14		900,444.11
Proceeds of loans.....	33			
Interest on loan funds.....	34			
Total special funds.....		350,841.32		1,631,926.58
Total receipts, all sources.....		2,236,594.73		2,913,162.53
				1,881,235.95

TABLE 18.—*Gross receipts of municipalities, detailed by sources and destination, fiscal year 1917-18.*

Items.	Total.	Ordinary funds, A.	Road funds, B.	Loan redemption funds, C.	Proceeds of loans, D.
<b>GENERAL REVENUES, \$1,901,347.88.</b>					
<b>Taxes</b>	<b>\$1,415,863.78</b>				
Property taxes, general funds..... 1		\$1,102,635.61			
Tax on sale and slaughter of meat..... 2		107,042.57			
Business licenses..... 3		200,802.77			
Dog and other licenses..... 4		5,382.83			
<b>Public service enterprises</b>	<b>252,607.23</b>				
Water supply systems..... 5		205,140.99			
Electric light plants..... 6		26,280.57			
Piers and docks..... 7		21,206.67			
<b>Use of municipal property</b>	<b>110,683.89</b>				
Sewers..... 8		2,536.51			
Markets..... 9		37,152.38			
Meat shops..... 10		12,799.72			
Slaughterhouses..... 11		15,726.89			
Animal pounds..... 12		10,234.31			
Cemeteries..... 13		9,923.51			
Municipal lots..... 14		1,394.88			
Theaters..... 15		2,364.42			
Hospitals (pay patients)..... 16		9,712.16			
Other property..... 17		8,839.11			
<b>Miscellaneous</b>	<b>22,192.98</b>				
Privileges..... 18		1,639.04			
Permits..... 19		1,238.53			
Fees..... 20		9,687.48			
Fines..... 21		190.50			
Interest..... 22		8,695.49			
Other current receipts..... 23		741.94			
<b>Repayments</b>	<b>40,346.28</b>				
Maintenance of insular prisoners..... 24		36,285.59			
Transportation of patients to asylums..... 25		233.14			
Other repayments..... 26		3,827.55			
<b>Receipts not current</b>	<b>39,541.79</b>				
Sales..... 27		4,167.27			
Grants, donations, etc..... 28		19,761.54			
Miscellaneous..... 29		15,612.98			
<b>SPECIAL FUNDS, \$1,031,926.58.</b>					
<b>Road funds</b>	<b>122,421.64</b>				
Property tax..... 30			\$122,421.64		
<b>Loan redemption funds</b>	<b>9,060.83</b>				
Property tax..... 31				\$9,010.27	
Interest on redemption funds..... 32				50.56	
<b>Loans</b>	<b>900,444.11</b>				
Proceeds of loans..... 33					\$900,444.11
Interest on loan funds..... 34					
<b>Total receipts, all sources</b> .....	<b>2,913,162.53</b>	<b>1,881,235.95</b>	<b>122,421.64</b>	<b>9,060.83</b>	<b>900,444.11</b>
<b>Cash balance, beginning of year</b> .....	<b>323,667.65</b>	<b>224,243.38</b>	<b>58,427.24</b>	<b>5,700.98</b>	<b>35,296.05</b>
<b>Total available for expenditure</b> .....	<b>3,236,830.18</b>	<b>2,105,479.33</b>	<b>180,848.88</b>	<b>14,761.81</b>	<b>935,740.16</b>
<b>Total expenditures during the year</b> .....	<b>2,721,409.67</b>	<b>1,938,731.98</b>	<b>120,777.34</b>	<b>2,480.68</b>	<b>659,419.67</b>
<b>Cash on hand at end of year</b> .....	<b>515,420.51</b>	<b>166,747.35</b>	<b>60,071.54</b>	<b>12,281.13</b>	<b>276,320.49</b>

TABLE 19.—*Outstanding indebtedness, detailed by municipalities, June 30, 1918.*

	Indebtedness, fixed.				
	Total.	Floating.	Current.	To insular government and trust funds.	Bonded indebtedness.
Grand total.....	\$2,303,463.59	\$20,635.22	\$4,630.89	\$55,807.68	\$2,222,389.80
Adjuntas.....	589.73	589.73			
Aguadilla.....	97,690.74		690.74	7,000.00	90,000.00
Agua Buenas.....	1,978.20			1,978.20	
Albionito.....	2,400.00			2,400.00	
Añasco.....	1,514.27		514.27	1,000.00	
Arecibo.....	1,679.74		1,679.74		
Arroyo.....	20,070.33		239.00		19,831.33
Barceloneta.....	2,500.00				2,500.00
Barranquitas.....	7,499.49				7,499.49
Bayamon.....	10,585.00	75.00	510.00		10,000.00
Caguas.....	75,000.00				75,000.00
Cayey.....	35,253.50	253.50			35,000.00
Celba.....	991.09		991.09		
Ciales.....	22,500.00				22,500.00
Coamo.....	7,500.00				7,500.00
Comerio.....	11,000.00				11,000.00
Coroal.....	4,500.00			4,500.00	
Dorado.....	5,000.00				5,000.00
Fajardo.....	92,400.00			4,400.00	88,000.00
Guanica.....	747.35	747.35			
Guayama.....	86,586.19	5,196.12		5,500.00	75,890.07
Guayanilla.....	17,000.00			1,000.00	16,000.00
Gurabo.....	19,695.00			1,695.00	18,000.00
Humacao.....	51,072.49	72.49			51,000.00
Isabela.....	3,000.00			3,000.00	
Jayuya.....	2,300.00	300.00			2,000.00
Juana Diaz.....	4,000.00				4,000.00
Juncos.....	30,220.00	220.00			30,000.00
Lajas.....	180.00	180.00			
Lares.....	51,000.00				51,000.00
Manati.....	357.86	357.86			
Mayaguez.....	12,131.49	2,547.01		9,584.48	
Naranjito.....	900.00			900.00	
Penuelas.....	11,850.00			600.00	11,250.00
Ponce.....	370,774.59	774.59			370,000.00
Quebradillas.....	850.00			850.00	
Rio Piedras.....	10,770.00	770.00			10,000.00
Salinas.....	22,500.00			4,500.00	18,000.00
San Juan.....	1,158,026.38	7,107.47		5,000.00	1,145,918.91
San Lorenzo.....	2,200.00			700.00	1,500.00
San Sebastian.....	10,000.00				10,000.00
Santa Isabel.....	6.05		6.05		
Tos Alta.....	1,200.00			1,200.00	
Tos Baja.....	8,565.26	565.26			8,000.00
Utusado.....	878.84	878.84			
Vega Alta.....	5,000.00				5,000.00
Vieques.....	21,000.00				21,000.00

<sup>1</sup> Independent bond issues.

## APPENDIX VI.

### REPORT OF THE COMMISSIONER OF THE INTERIOR.

OFFICE OF THE COMMISSIONER OF THE INTERIOR,  
San Juan, P. R., August 22, 1918.

SIR: In accordance with the provisions of section 13 of the act of Congress entitled "An act to provide a civil government for Porto Rico and for other purposes," approved March 2, 1917, I have the honor to submit the annual report of the operations of the department of the interior for the fiscal year ended June 30, 1918.

#### THE DEPARTMENT OF THE INTERIOR.

Section 16 of the organic act provides that the commissioner of the interior shall superintend all work of a public nature, have charge of all public buildings, grounds, and lands except those belonging to the United States, and shall execute such requirements as may be imposed by law with respect thereto, and perform such other duties as may be provided by law.

The work of the department is done by the following bureaus and divisions:

*Bureau of public works.*—This bureau is in charge of all works on roads, bridges, harbors, and docks. These works are performed by four separate offices: (a) Surveying and location of proposed roads; (b) construction of new roads and bridges; (c) designing and estimates of bridges and culverts; (d) maintenance of finished roads.

Each one of these offices is in charge of an engineer and under the supervision of the superintendent of public works, who also assists the commissioner in rendering the reports relating to franchises, railroads, waterworks, docks, etc., when requested by the public-service commission.

*Division of public buildings.*—This division is in charge of the designing, construction, and maintenance of all buildings which are property of the people of Porto Rico.

*Division of municipal works.*—This division is in charge of the designing and construction of waterworks, sewers, and other municipal improvements for towns which obtain money for such improvements by means of loans from the insular treasury.

*Division of public lands.*—This division is in charge of all public lands in the island making the necessary surveys, leases, etc., and also has charge of the archives relating to public lands, water concessions, harbors, docks, etc.

*Bureau of insular telegraph.*—This bureau, which is under the direction of a superintendent, operates a system of telegraph and telephone lines which covers practically all of the towns throughout the island. This office also renders reports pertaining to franchises of telegraph and telephone lines by private corporations.

*Division of harbors and docks.*—This division is charged with the supervision of shipping and pilotage and the collection of harbor dues and wharfage at the various ports of the island, and is under the direction of the chief engineer of the San Juan harbor board.

*Irrigation service.*—This branch of the department is in charge of the operation and maintenance of the public irrigation system in the southern part of the island.

*Division of disbursements and accounts.*—This division keeps the record of all expenditures incurred by the several bureaus and divisions of the department, prepares vouchers and disburses the money for laborers' pay rolls; keeps an inventory of all property, machinery, tools, etc.; issues licenses to automobiles and chauffeurs, collects the taxes fixed by law for motor vehicles, and keeps a record of all automobiles and chauffeurs.

The work performed by these bureaus and divisions during the fiscal year ended June 30, 1918, is as follows:

#### BUREAU OF PUBLIC WORKS.

The following table shows a general statement of appropriations and expenditures:

*Bureau of public works—General statement of appropriations and expenditures.*

	Appropriation.	Repayments.	Transferred to appropriation.	Total credits.	Expended prior to fiscal year 1917-18.	Expended during fiscal year 1917-18.	Balance at end of fiscal year 1917-18.
Maintenance, repair, and construction of insular roads and bridges.....	\$625,000.00	\$6,802.75	.....	\$631,802.75	.....	\$608,886.41	\$22,916.34
1916-17.....	\$30,000.00	.....	.....	\$30,000.00	.....	36,545.05	26.10
1916-17.....	\$30,000.00	.....	.....	\$30,000.00	.....	36,545.05	193,953.44
Bridges and road construction acts of 1913, 1914, 1915, 1916, 1917.....	\$42,800.00	10,585.58	.....	\$53,385.58	.....	50,000.00	181,305.30
Road bond fund, 1916 (\$2,000,000).....	\$12,800.33	\$64.02	.....	\$12,864.35	.....	12,864.35	.....
Total.....	2,310,000.33	24,232.35	22,860.54	2,357,232.22	918,168.17	1,040,913.87	306,201.18

## CONSTRUCTION OF ROADS AND BRIDGES.

Sufficient location surveys and plans had been completed by the end of the past fiscal year to enable the department to undertake early this year the construction of some of the roads and bridges for which the amount of \$500,000 had been made available from the \$2,000,000 bond issue authorized for this purpose by Act No. 71 of the legislature approved April 13, 1916.

Awards of contracts for such construction payable from the bond issue were made from time to time during the year to the limit of the funds available. Other construction work was also undertaken under special appropriations, bringing the total volume contracted for during the year as given in the following account:

Date of award.	Nature of work.	Amount of contract.
July 17, 1917	Arecibo-Lares, kilometers 19-4-24.8	\$53,332.36
July 30, 1917	40-meter span reinforced concrete bridge over Río Bucana, Ponce-Guayama road.	14,145.28
Aug. 3, 1917	6.5-meter span reinforced concrete bridge over Cano Guatemala, Aguadilla-Lares road.	5,700.00
Aug. 10, 1917	2 kilometers of Yauco-Lares road, kilometers 0-2	9,700.00
Aug. 22, 1917	4 reinforced concrete culverts on the Mayaguez-Anasco road.	2,300.36
Aug. 29, 1917	Completion of bridge over Río Bayamon, Martín Peña-Bayamon road.	27,922.19
Sept. 14, 1917	5-meter span reinforced concrete culvert over Quebrada "La Fe," Naguabo-Juncos road.	1,795.00
Oct. 3, 1917	2.5 kilometers road, Corozal-Barros section, and a 30-meter span reinforced concrete bridge over Río Corozal.	41,219.00
Oct. 18, 1917	3 kilometers of road, kilometers 19.9-22.8 on Mayaguez-Las Vegas-Maricao road.	18,490.27
Oct. 29, 1917	3 reinforced concrete bridges on Las Cruces-Cidra road.	5,200.00
Oct. 30, 1917	70-meter span reinforced concrete bridge over Río Santiago, Naguabo-Humacao road.	19,199.00
Nov. 6, 1917	5-meter span reinforced concrete culvert and 6 pipe culverts on Bayamon-Toa Alta road.	4,000.00
Dec. 20, 1917	3.5 kilometers of Ciales-Juana Díaz road, Destierro-Villalba section.	27,488.70
Jan. 20, 1918	6 kilometers of road from kilometer 15 to kilometer 21, Yauco-Lares road.	53,000.00
Jan. 21, 1918	6 kilometers of the Adjuntas-Lares road.	66,444.00
Jan. 30, 1918	Bridge over Quebrada Angostura and approaches, Manatí-Arecibo road.	6,120.00
Do.	2 reinforced concrete bridges over Quebradas Ingenio and Cortadera, on the Humacao-Yabucoa road.	10,045.71
Feb. 6, 1918	3 reinforced concrete bridges on Quebradas Vueltas, Emajagua, and Ceiba, Palardo-Ceiba road.	17,713.00
Feb. 11, 1918	20-meter span reinforced concrete bridge over Cano Yabucoa, Humacao-Yabucoa road.	17,353.21
Mar. 5, 1918	30-meter span reinforced concrete bridge over Río Guayanes, Humacao-Yabucoa road.	18,400.00
Mar. 7, 1918	9 kilometers of the Arecibo-Lares road, kilometers 24.8 to 33.8.	65,430.00
Mar. 30, 1918	8 kilometers Ciales-Juana Díaz road, section Juana Díaz-Destierro.	55,109.53
June 17, 1918	10-meter span reinforced concrete bridge over Quebrada Los Romanes, Aguadilla-Lares road.	5,794.00
Do.	Excavations for grading 2.5 kilometers of road, Corozal-Morovis section.	13,370.00
Do.	88-meter span reinforced concrete submersible bridge over Río Grande de Loiza, on Las Piedras-San Lorenzo road.	12,550.00
June 29, 1918	50-meter span reinforced concrete arch bridge over Río Inabon, Ponce-Guayama road.	34,000.00
	Total contracted for	604,821.61

In addition to the above-mentioned construction, the bureau of public works had under way all work that was contracted for prior to and continued during the fiscal year just ended, and besides a certain amount of work which was carried out by administration.

The following detailed statement shows the amount actually expended during the year on road and bridge construction:

<b>Roads:</b>	
Alto La Bandera-Jayuya, relocation.	\$4,606.50
Arecibo-Lares.	75,208.31
Yauco-Lares.	31,846.69
Las Piedras-San Lorenzo.	1,939.01
Corozal-Barros.	55,142.95
Mayaguez-Las Vegas-Maricao.	19,377.35
Ciales-Juana Díaz.	32,181.37
Lares-Adjuntas.	30,498.98
Corozal-Morovis.	1,970.94
Bayamon-Toa Alta.	17,458.98
Vieques Island Road.	21,987.13
Martín Peña-Bayamon.	5,818.18
<b>Total.</b>	<b>297,987.34</b>

**Bridges and culverts:**

Bridge over Bucana River on Road No. 3	\$14,737.31
Over Inabon River on Road No. 3	275.03
Over Cano Guatemala, Aguadilla-Lares Road	4,185.59
Bridges over Portuguese River	8,472.56
Over Rio Vegas, Yauco-Lares Road	648.91
Over Rio Guayanes, on Humacao-Yabucoa Road	7,011.98
Two bridges over Rio Ingenio and Quebrada Cortadera, on Humacao-Yabucoa Road	8,432.37
Over Cano Yabucoa, near Yabucoa	390.27
Over Quebradas Vueltas, Emajagua and Ceiba, on Fajardo-Ceiba Road	16,469.00
Surveys of sites for bridges on the Naguabo-Ceiba Road	14.00
Bridge over Rio Bayamon on the Martin Pena-Bayamon Road	22,067.20
Over Quebrada Angostura, Manati-Arecibo Road	6,822.04
4 culverts on the Mayaguez-Anasco Road	1,753.96
4 culvert over Quebrada La Fe, Naguabo-Juncos Road	1,795.00
3 bridges on Las Cruces-Cidra Road	5,568.59
Bridge over Rio Santiago, Naguabo-Humacao Road	12,311.58
Culvert over Quebrada Los Muertos on the Caguas-Aguas Buenas Road	2,666.27
Culverts on Vieques Island Road	2,823.00
Culverts at Calvache and Ferrer on the Aguadilla-Anasco Road	3,100.00
<b>Total</b>	<b>119,564.66</b>
<b>Resumé:</b>	
Expended on road surveys	41,525.00
Expended on road construction	297,987.34
Expended on bridges and culverts	119,564.66
<b>Total expended</b>	<b>459,077.00</b>

The appropriations from which this expenditure of \$459,077 was paid appear in the following subdivision:

Appropriation for maintenance and construction of insular roads and bridges, fiscal year 1916-17:	
Construction of portion of Alto La Bandera-Jayuya Road	\$4,006.50
Construction of several bridges and culverts	60,121.37
Special appropriations for bridge and road construction, acts of 1913, 1914, 1915, 1916, 1917:	
Surveys	\$4,742.13
Construction of roads	54,738.73
Construction of bridges	27,125.67
	<b>86,606.53</b>
Road bond fund, 1916 (\$2,000,000):	
Surveys	36,782.87
Construction of roads	238,642.11
Construction of bridges	32,317.62
	<b>307,742.60</b>
<b>Total</b>	<b>459,077.00</b>

Adding to the above noted expenditure of \$307,742.60 under the road bond fund of 1916, the amount of \$357.29 expended on purchase and repair of surveying instruments, and also the expense of the bond issue, which amounted to \$775.99, there is obtained the total of \$308,875.88 expended during the year as shown in the "General statement of appropriations and expenditures."

The following statement shows the amounts expended from the \$2,000,000 bond issue prior to and during the past fiscal year on surveys and construction of the various roads and bridges:

*Expenditures from road bond fund of \$2,000,000, act of 1916.*

	Year 1916-17.		Year 1917-18.		Total to date.
	Survey.	Construction.	Survey.	Construction.	
Arecibo-Lares road			\$590.08	\$63,556.88	\$64,146.96
Yauco-Lares road			4,392.33	20,802.58	25,194.91
Coronel-Barro road	\$5,958.91		6,965.29	55,142.95	68,067.15
Mayaguez-Maricao road	2,167.53		3,812.09	19,377.35	25,356.97
Ciales-Juana Diaz road	5,609.65		6,324.81	32,181.37	44,115.83
Lares-Adjuntas road	6,647.87		12,286.10	30,469.98	49,413.95
Vieques Island road				8,111.00	8,111.00
Maricao-Indiera road			2,402.57		2,402.57
Utua-Lares road	2,827.63		9.60		2,837.23
Bridge over Rio Guayanes				7,011.98	7,011.98
Ingenio and Cortadera bridges				8,432.37	8,432.37
Bridge over Cano Yabucoa				390.27	390.27
Bridges over Quebradas Vueltas, Emajagua, and Ceiba				16,469.00	16,469.00
Naguabo-Ceiba bridges				14.00	14.00
Purchase and repair of surveying instruments	561.58		357.29		918.87
<b>Total</b>	<b>23,773.17</b>		<b>37,154.16</b>	<b>270,945.73</b>	<b>331,873.06</b>
Plus expenses of bond issue					775.99
<b>Total expenditure to date</b>					<b>332,649.05</b>

The total of \$297,987.34 expended in roads shows that a large volume of work was accomplished during the year, although only a small proportion of it was actually finished. The length of macadamized road completed aggregated 15.2 kilometers, as shown in the following statement:

New construction:	Kilometers.	Reconstruction:	Kilometers.
Arecibo-Lares.....	2.0	Corozal-Barros.....	3.6
Yauco-Lares.....	3.0	Manatí-Arecibo.....	.3
Las Piedras-San Lorenzo.....	.5	Alto-Bandera Jayuya.....	.4
Las Vegas-Maricao.....	1.3	Total.....	4.5
Corozal-Barros.....	1.9	Grand total.....	15.2
Isla de Vieques.....	2.0		
Total new construction.....	10.7		

The bridges completed and opened to public use during the fiscal year are listed in the following statement, which also gives the location, span, and total cost of each. These bridges are all of reinforced-concrete construction.

Bridge over—	Location, municipality.	Span, meters.	Total cost.
Bucana River.....	Ponce.....	40	\$14,737.31
Cafío Guatemala.....	San Sebastián.....	6.50	5,085.14
Bayamon River.....	Bayamon.....	80	50,000.39
Quebrada Angostura.....	Barceloneta.....	6.50	6,322.04
Cidra road:			
At kilometer 4, Río Bayamoncito.....	Cidra.....	20	5,568.59
At kilometer 6.9, Quebrada La Sabana.....	do.....	7	
At kilometer 7.5.....	do.....	2	
Quebrada Los Muertos.....	Caguas.....	6	
			2,666.27

A brief description of the various roads and bridges constructed during the year is given below.

#### ALTO BANDERA-JAYUYA.

Surveys for this road were begun in the year 1901, and were completed for a length of 23 kilometers. Construction work, however, was not started until 1904, and during the period between 1904-1908, 22 kilometers of road were completed, leaving only 1 kilometer at the Jayuya end to be done at that date.

Owing to the fact that traffic was so light at the time this road was constructed, 1904, it was decided to give the roadway a width of only 5 meters, making the metalled surface 3 meters wide. In order to reduce the cost of construction, a route was chosen which, on account of its close proximity to the Río Grande de Jayuya, between kilometers 17 and 18, was liable to washouts during the high floods of this river.

At the close of 1916, during an extraordinary high flood, a portion of the road 400 meters in length was washed away, so that it became necessary to relocate the road at this place, and at the same time secure a better fording place on the Jayuya River.

To carry out this work, a contract was let for the construction of 3 concrete culverts, a retaining wall to protect the road from the eroding action of the river, and 400 linear meters of macadam road. The work of construction was started during the year 1916-17, but was not finished until the present fiscal year. The total cost of this construction was \$4,606.50, which was paid from the appropriation for construction, maintenance and repairs of public roads and bridges corresponding to the fiscal year 1916-17.

The department not having sufficient funds to construct the remaining kilometer of road at the Jayuya end, the legislature approved an act in December, 1917, declaring the section between kilometers 20 and 22 to be an insular road and appropriating the sum of \$4,000 for its construction. As mentioned elsewhere in this report, the commissioner has not been able to proceed with the provisions of this act, because funds have not been available.

#### ARECIBO-LARES ROAD.

The section of road No. 13, between Arecibo and Lares, is regarded as one of the most important arteries for the transportation of the products from the rich coffee zone in and around Lares to the coast.

The work of construction of this section was begun during the year 1907 when the first 10 kilometers on the Arecibo side were completed. During the period between 1910-1912, 3 kilometers of road were finished with the aid of convict labor and later during the years 1913 and 1914, 6½ kilometers were completed, bringing the total length of finished road to 19½ kilometers.



This road occupies the second place in the order of precedence approved by the economy commission on July 8, 1916, for the construction of roads and bridges to be paid from the \$2,000,000 road fund. To carry out the remaining work of construction of this section, a contract was let at the beginning of the current fiscal year, which called for the construction of 5.4 kilometers of road between kilometers 19.5 and 24.8 at a cost of \$53,332.36, and another contract was entered into in March, 1918, for the construction of the last portion consisting of 9 kilometers at the Lares end, at a contract price of \$65,430, making the total cost of both contracts \$118,762.36. It is expected that the work of construction of the 14.4 kilometers included in these contracts will be completed by December, 1918, so that through traffic can be inaugurated between Lares and Arecibo, thereby filling a long-felt need. This will be the first road entirely completed from the \$2,000,000 bond issue.

The total amount expended to June 30, 1918, on this construction is \$75,208.31, \$11,651.43 of which is paid from a special appropriation of \$60,000 approved by the legislature on March 1913 for the construction of this road, and the remaining \$63,556.88 will be charged against the \$2,000,000 road fund.

The status of the work to June 30, 1918 is as follows: Two kilometers of road are entirely finished, and grading and bridging has been completed for a length of 11.4 kilometers.

#### YAUCO-LARES ROAD.

In March, 1906, the legislature approved an act authorizing the insular government to sell bonds amounting to \$1,000,000 to be used in the construction of insular roads, in accordance with a general plan approved by the legislature.

Among the roads included in this plan, is road No. 16, which, starting in the town of Yauco, crosses the main divide and following in part the route of road No. 14 (Maricao-Indiera), connects at barrio Bartolo with the Lares-Adjuntas section of road No. 8. The length of the road between Yauco and the junction with the Adjuntas-Lares road is estimated at about 38 kilometers.

The longest section of this road constructed under the above act was the stretch of 7 kilometers completed between kilometers 2 and 9, on the Yauco end, as well as the uncompleted grading of about 6 kilometers near the main divide.

The territory which the construction of this road will serve is one of the richest sections of the island, and for this reason the legislature in the year 1913 set aside the sum of \$60,000 to continue the construction of this road, which amount was expended on the reconstruction and completion of the portion of road included between kilometers 9 and 15, and the grading between kilometers 15 and 18. The construction of a reinforced concrete bridge over Las Vegas River was also completed, the cost of which was paid from a special appropriation made by the legislature in March, 1913, for the construction of bridges over the Duey and Las Vegas rivers.

Since the road is No. 6 in the approved list, as soon as the first bond issue of \$500,000 from the \$2,000,000 road fund was sold, the department immediately proceeded to prepare a project for the completion of the 2 kilometers of this road, near Yauco, which had not been constructed in 1908, and for the construction of 6 kilometers between kilometers 15 and 21.

The work of construction in the first 2 kilometers consisted in widening and grading the old municipal road leading out of Yauco, and building several culverts, all of which has been entirely completed during the year, thus establishing through communication from Yauco as far as kilometer 15 of this road.

The contract for the construction of the portion of road between kilometers 15 and 21, includes the completion of the grading, construction of culverts, and macadamizing the entire length of 6 kilometers of road.

The cost of construction of the 2 kilometers near Yauco, not including inspection, is \$9,749.45, and the amount expended to June 30, 1918, on the contract for the portion between kilometers 15 and 21, is \$20,861.70, making a total of \$30,611.15. Of this amount \$29,802.58 were paid from the \$2,000,000 road fund, and \$808.57 from the special appropriation approved by the legislature in March, 1913, for the construction of this road. There was also paid from this special appropriation the amount of \$1,235.54 for work done by the contractor during the previous year, on the contract pertaining to kilometers 9 to 15, which sum represents the 10 per cent retained on this contract, and brings the total expended on this work during the year to \$31,846.69.

#### LAS PIEDRAS-SAN LORENZO ROAD.

The road between San Lorenzo and Las Piedras has a total length of 12 kilometers of which 6 kilometers at the end near Las Piedras had been completed prior to the year 1915. The construction of the other 6 kilometers was begun during the year 1915-16 under an act approved by the legislature in March, 1913, appropriating the sum of \$30,000 for this purpose.

The total cost of the work was \$31,450.36, of which the sum of \$1,939.01 was expended during the past fiscal year. As was explained in the last annual report, the work was undertaken by administration under special agreement with the contractor, whose financial condition did not permit him to complete the work.

The completion of the road facilitates communication between the towns of San Lorenzo and Las Piedras, but there still remain to be built two large bridges over the Valenciano and Grande de Loiza rivers. The ford on the Rio Grande de Loiza at San Lorenzo is very dangerous on account of the large flow of this river, and as the road without a bridge was practically of no use, especially for motor vehicles, it became necessary to build a bridge at this place. To this end a contract was let in June, 1918, for the construction of a reinforced-concrete bridge 88 meters long, so designed that its floor line will be submerged only during extraordinary floods.

The work of construction is proceeding rapidly and the contract price of \$12,550 is paid from the general appropriation for the construction, maintenance, and repairs of public roads and bridges during the fiscal year 1918-19.

#### COROZAL-BARROS ROAD.

From the \$1,000,000 fund which was authorized in the year 1906, the sum of \$30,000 was set aside for the construction of 6 kilometers of this road between the Corozal River and the divide between the Negros and Cibuco rivers. In 1909 these were completed, and further work on this road was prevented on account of lack of funds.

The Corozal-Barros road now stands fourth on the list approved in 1916 by the economy commission, to be built from the \$2,000,000 fund. On October 3, 1917, a contract was let for the construction of 2½ kilometers of road and a reinforced concrete bridge 30 meters long over the Corozal River. The work of construction has proceeded very rapidly so that by June 30, 1918, the 2½ kilometers were practically completed. The reconstruction of the first 6 kilometers of road built in 1909, which had not been properly maintained on account of lack of funds and which was practically unserviceable was also undertaken during this year.

The reason for having commenced work on the Corozal end was due, first, to the fact that in 1909 a section had been completed, and second, that the cost of hauling construction materials to Corozal from San Juan would be much cheaper than by the way of Barros.

The total amount expended on this construction during the present fiscal year is \$55,142.95, paid from the \$2,000,000 road fund. As soon as the work of reconstruction is finished the total length of the completed section of road will be 8 kilometers from Corozal toward Barros.

The total length of this road between the towns of Corozal and Barros is about 33 kilometers, and the portion already built will not be of any great benefit to the agricultural people of this section until the road is built as far as the divide between the Maticana and Corozal Rivers, as the place where it now has been completed is not practically accessible to the municipal road at present uniting the two towns. On this account the department will give special attention to this highway in case the second installment of \$500,000 of road bonds is sold.

#### MAYAGUEZ-MARICAO VIA LAS VEGAS.

Previous to the year 1907 traffic was carried on between Mayaguez and Maricao by means of a municipal road passing through a place called Las Vegas and having a length of 25.3 kilometers. By an act of the legislature approved March 14, 1907, the sum of \$120,000 was appropriated for the construction of several insular roads, among which was included the section between Mayaguez and Maricao by way of Las Vegas. To carry out the work of construction the sum of \$30,000 was set aside from the above-mentioned appropriation. As it was not possible with the amount assigned for new surveys to obtain a better location and at the same time proceed with the work of construction, the improvement of the municipal road between Mayaguez and Las Vegas was undertaken, and work was continued until the fiscal year 1908-9, when 16.3 kilometers of road were completed, at a cost of \$43,000, and opened to traffic as an insular road. After this date, and during the year 1911, surveys on the section of road between Las Vegas and Maricao were made, and during the years 1914-15, 3.5 kilometers were completed, making a total of 19.8 kilometers from Mayaguez.

Of the total distance of 6 kilometers remaining to be constructed to reach Maricao, 3 kilometers between kilometers 19.8 and 22.8 were let by contract on October 18, 1917, at a price of \$18,490.27. Slow progress has been made on account of the heavy rainfall, which caused delays and a great many slides. To June 30, 1918, 1.3 kilometers have been entirely finished, and grading and culvert construction has been completed on the remaining 1.7 kilometers. On account of the poor condition of the macadam on the first 3 kilometers of road from Las Vegas to Maricao, built in 1915, it was neces-

sary to undertake the reconstruction of this section, and to that effect a contract was entered into for the furnishing of 1,455 cubic meters of broken stone as a part of the extensive repairs. The total expenditure on this construction during the year is \$9,377.75, which includes the amount of \$737.59 paid for broken stone delivered before June.

The completion of this road, which ranks No. 5 in the order of construction approved by the economy commission, will be taken up as soon as funds from the second installment of \$500,000 of road bonds are placed at the disposal of the department for road construction.

#### CIALES-JUANA DIAZ ROAD.

Up to the year 1906 only 13 kilometers of road No. 11, Manatí-Ciales section, had been completed, the section between Ciales and Juana Diaz, about 55 kilometers in length, remaining to be constructed.

In 1906 surveys were begun and actual construction on the road was commenced in November, 1907, when the \$1,000,000 of the bond act approved in 1906 became available. The four contracts at that time covered a length of 20 kilometers, of which the following were completed: Five kilometers on the section between Villalba and the main divide and 13 kilometers on the Ciales end. Also some grading was done on the section between the main divide and the Toro Negro River, which portion was abandoned for lack of funds. No work was done on the 12 kilometers between Juana Diaz and the town of Villalba at that time, because the municipal road was, as a general rule, in passable condition, while that from Villalba up into the valley of the Toro Negro River was nothing but a trail in very poor condition. Another reason for beginning at Villalba is that the irrigation service contemplated as a part of the irrigation system on the south coast, the construction of a reservoir at the place known as Guayabal, the location of which affected the location of the road between the two towns. It was decided, therefore, to wait until the definite location of the reservoir had been determined, so as to avoid interference with the projected road.

Nothing further was done on this road until the approval of the \$2,000,000 bond act by the legislature on April 13, 1916, when the economy commission placed this road as No. 3 in the list prescribing the order of precedence. As soon as the money from the first issue of \$500,000 of bonds was available projects were completed for the construction of two sections of this road, and the first contract was let on December 20, 1917, calling for the construction of 3½ kilometers of road between Destierro and Villalba, beginning at kilometer 8 and ending at kilometer 11.5, for a total amount of \$27,488.70. By June 30, 1918, all grading had been completed; also all culvert construction.

The other contract, which called for the construction of 8 kilometers between Juana Diaz and Destierro, was let on March 30, 1917. The construction of this section was considered very important, as the municipal road, which has been previously mentioned, follows the Jacaguas Valley and crosses the river of this name three times before reaching the place known as Guayabal, where the dam of the irrigation service is located. This dam had been provided with a roadway which was to form part of this road when completed. In this contract was also included the reconstruction of the road built by the irrigation service in place of that portion of the municipal road which was flooded by the Guayabal Reservoir.

Work on this contract has not been carried out in such a way as to secure rapid progress, as the contractor was unable to proceed with the work and has turned over the contract to another party. However, special efforts have been made to speed it up and complete it within the time specified in the contract, as the road is much needed by the coffee planters of the municipality of Villalba, whose only means of communication with the rest of the island at the present time is through a municipal road, poorly maintained and practically impassable during the rainy period on account of mudholes and the washouts of the Jacaguas River.

To June 30, 1918, there has been expended the sum of \$22,502.14, corresponding to the first contract between Destierro and Villalba, and a total of \$6,989.86 has been paid under the second contract for work done between Juana Diaz and Destierro. The total expenditure during the year, including expenses of inspection, amounts to \$32,181.37.

#### LARES ADJUNTAS ROAD.

This road follows one of the most abrupt routes of the mountain district of the island. It starts from the town of Lares and crosses the rivers Blanco, Yahuecas, and Río Grande de Arecibo, where connection is made at kilometer 3, of the Adjuntas-Utuado road.

Work on this road was begun in the year 1908, when the construction of the section between Lares and Río Blanco, 12 kilometers long, was completed under the \$1,000,000 bond act approved in 1906.

In 1916 careful surveys were started on the remaining part of this road, as this construction will be one of the most expensive ever attempted, due to the excavation work and the very important water courses encountered where masonry and concrete structures will have to be built, especially on the section between the rivers Blanco and Yahuecas.

The portion of this road between Yahuecas River and the junction with the Adjuntas-Utuado road at kilometer 3 has been under construction since January 21, 1918, when a contract was approved for the first 5 kilometers at a cost of \$53,000.

Construction was begun on the Adjuntas end instead of continuing from Rio Blanco, as the policy of the department is to give easy access to their respective markets to those territories which for many years have been deprived of good means of communication with the near towns.

The work on these 5 kilometers is progressing at a fair rate; the grading has been completed over a length of 3.3 kilometers and about 50 per cent of the masonry structures have been finished. This work is paid from the \$2,000,000 bond appropriation, and the expenditure during the year amounted to \$30,469.98.

In regard to the use of the portion under construction, not much benefit will be attained until the bridge over the Rio Grande de Arecibo is constructed. The importance of this road is noted at a glance, since it appears as No. 1 in the order of preference established by the economy commission for the construction of roads.

#### COROZAL-MOROVIS ROAD.

The legislature, in March, 1913, approved an act appropriating \$25,000 for the construction of a section of road 12 kilometers long to connect the town of Morovis and the Corozal-Barros road at kilometer 4 from Corozal. The amount of \$5,598.88 was expended on survey work prior to the fiscal year just ended, and the available balance of \$19,401.12 was assigned for the construction of a portion of this section. A project was prepared and approved for the grading of nearly 4 kilometers of road and the excavation of side ditches with the idea of constructing the culverts and the metal part of the road when funds from the second \$500,000 of the bond issue became available, as this road stands No. 13 in the order of construction approved by the economy commission. The contract under which the work is being carried out was approved on June 17, 1917, and the contract price is \$13,370. Work is progressing rapidly, and it is expected that the grading of the first 2½ kilometers will be completed inside of two months.

#### BAYAMON-TOA ALTA ROAD.

By a special act of the legislature approved on April 13, 1917, the sum of \$25,000 was appropriated for the construction of a road which, starting at kilometer 3 on road No. 9, Bayamon-Comerio, passes through the valleys of Bayamon and Toa Alta and ends at the latter town.

The construction of this road has been carried out under the direction of the personnel of the department with the use of convict labor. The work of grading has been finished as far as Escache Creek, a distance of 4 kilometers, and sufficient stone has been stored along the road to macadamize 1 kilometer. The amount expended on this construction during the year is \$12,294.92, including inspection expenses. On account of the grading work which was ordered done near Puerta de Tierra, at the place known as Escambron, which is described in another part of this report, the convicts working on this road were transferred to the penitentiary at San Juan, thus causing a delay of over two months in the construction of the road.

It is intended, however, to make up the time lost on this account by resuming the work some time before the rainy season with a strong force of prisoners and with all the equipment necessary to produce results.

The construction of a 5-meter span reinforced concrete bridge over Quebrada Escache and six concrete pipe culverts was undertaken by contract approved on November 6, 1917, for the amount of \$4,000. Owing to the poor foundation encountered, also to changing the width of the culverts from 5 to 6 meters, the actual cost of the contract amounted to \$5,164.01. The work has been entirely finished and the culverts were provisionally accepted on March 30, 1918. The total amount expended on the work of construction of this road during the fiscal year is \$17,458.93.

#### VIEQUES ISLAND ROAD.

Previous to the year 1907 the insular government had made no provision for road building in the island of Vieques. The sum of \$5,000 was assigned from the appropriation of \$120,000 approved in March, 1907, for the construction of several roads to start the work of construction of a portion of this road, which starts at the town of

Isabel II and runs along the coast, passing through the "poblados" of Mosquitos and Playa Grande. During the year 1908 only 0.9 kilometer was constructed, at a cost of \$2,000. This work was done with the aid of convict labor, which, on account of the scarcity of labor, is about the only available means of doing any public work on this island. During the same year work was also being done on the grading of 2 kilometers of this road, to be paid from the \$250,000 appropriation approved on March 12, 1908. Up to 1910 a length of 5 kilometers had been completed, which, owing to lack of funds, was not maintained.

During the fiscal year 1916-17 construction work was resumed with the aid of convict labor, using the available balance of the \$25,000 appropriated in March, 1913. The work accomplished during the year just ended consists of the completion of 2 kilometers, the grading of another one-half kilometer, construction of six reinforced-concrete culverts, and securing sufficient stone stored alongside the road to macadamize about 2 more kilometers. The work of reconstructing and maintaining 4 kilometers of this road between kilometers 1 and 5, which had been abandoned since their completion in 1910, was also accomplished at a cost of \$2,840. The total amount expended on this road during the year is \$21,967.13, of which \$13,856.13 corresponds to the appropriation approved in March, 1913, and the other \$8,111 to the \$2,000,000 road-bond appropriation, this road being No. 7 in the approved order of construction.

In addition the sum of \$2,823 from the appropriation for construction, maintenance, and repairs of public roads and bridges, fiscal year 1917-18, was expended on material for culvert construction.

#### MARTIN PEÑA-BAYAMON ROAD.

The legislature in 1915 appropriated the sum of \$55,000 for the construction of 5½ kilometers of this road at the Bayamon end. Of this amount, a total of \$33,096.42 was expended during the fiscal years 1915-16 and 1916-17, on the construction of this road, which was opened to traffic in March, 1917, but, as stated in last year's report, not much use could be made of this road until the bridges over the Bayamon River were completed.

With the balance from the above appropriation the construction of two bridges was started in the fiscal year 1915-16, and work was carried forward until April, 1917, when the appropriation was exhausted and the work stopped. On account of difficulties encountered in the foundations, involving extra expenditures as was fully explained in last year's report, it was decided to wait until the beginning of the fiscal year just ended in order to complete these structures with funds from the appropriation for construction, maintenance, and repair of public roads and bridges. These bridges were entirely finished and opened to traffic on January 9, 1918, at a total cost of \$50,009.39, which was paid from the special appropriation approved in 1915, and from the appropriation for the construction, maintenance, and repair of public roads and bridges.

The expenditure during the year amounted to \$5,818.18, representing amounts that had been retained from the contractor for work done during the previous year.

#### BRIDGES ON THE PONCE-GUAYAMA ROAD.

The construction of five bridges over the Bucana, Inabon, Jacaguas, Descalabrado, and Coamo Rivers, which cross this section of road No. 3, has long been necessary in order to put an end to the inconvenience to traffic arising from the interruptions caused by freshets which occur quite frequently in these streams during the rainy season every year. An act of the legislature, approved April 2, 1917, provides for an appropriation of \$70,000 to build these bridges.

Two bridges were started this year. One, over the Bucana River, consisting of four 10-meter spans built of reinforced concrete throughout, with steel I-beams supporting the floor and resting on concrete piles foundation. It is of the submergible type with the floor line set at such an elevation that the bridge can be used during ordinary floods. The contract for this work was let on July 20, 1917, for the amount of \$14,145.28, and the work has been entirely finished during the year at a cost of \$14,737.31, including inspection expenses.

The other bridge is of three 15-meter arch spans, over the Rio Inabon. It is to be of reinforced concrete resting on a wooden pile foundation. The contract for this bridge, amounting to \$34,000, was approved on June 29, 1918, and the expenditure made during the year under the contract amounts to \$275.03.

This bridge is to be completed by May, 1919, and with the expenditures made on the Bucana Bridge will reduce the appropriation from \$70,000 to \$21,262.69, and it is the intention of this department to use this balance to construct the bridge over the Jacaguas River. This will leave two bridges which can not be constructed for lack of funds. The order followed on the construction of these bridges was in accordance with the order specified in the act.

## BRIDGE OVER CAÑO GUATEMALA ON THE AGUADILLA-LARES ROAD.

On the Aguadilla-Lares road there was an iron bridge known as Ponton Garcia over the Guatemala Creek, which was destroyed by the cyclone in the year 1899. Since that time a temporary wooden structure, which has been maintained on the downstream side of the old location, has offered a very dangerous crossing to traffic. The condition of this wooden bridge was so bad that it was necessary to replace it with a permanent structure, and accordingly a reinforced-concrete bridge of 64-meter span was designed.

The work was done under a contract approved August 3, 1917, and the amount paid the contractor was \$4,185.59, of which amount \$2,991.86 were paid from an appropriation of \$3,000 made especially for this bridge by the legislature in April, 1916, and the balance of \$1,193.73 was paid from the general appropriation for the construction, maintenance, and repairs of roads and bridges.

Materials furnished the contractor to the amount of \$1,850.55, were bought the previous fiscal year, 1916-17, and paid from the maintenance appropriation. The total cost of this bridge was therefore \$6,035.14.

## PORTUGUES RIVER BRIDGE.

As late as 1913, the bridges over the Inabon, Cerrillos, and Portugues Rivers, in road No. 1, near Ponce had not been constructed. In March, 1913, the legislature passed a law appropriating the amount of \$75,000 for the construction of these bridges. In 1914 the bridges over the Cerrillos and Inabon Rivers, were completed under contract at a cost of \$14,166.46 and \$20,878.35, respectively. With the balance left in this appropriation, which amounted to \$43,367.70 in 1916, plus the sum of \$5,052.80, transferred from the appropriation for the construction of the bridges over the Canas, Pastillo, and Tallaboa Rivers, on road No. 2, which had been already finished by this date, the construction of two reinforced-concrete bridges over the Portugues River was undertaken. The first was built on road No. 1 on the Guadalupe Street entrance to Ponce, and the other on road No. 3, Guayama-Ponce section at the Comercio Street entrance. Both these bridges were completed during the fiscal year 1916-17, at a total cost of \$44,105.38. The final liquidation was made at the beginning of this fiscal year, when the sum of \$7,097.17 was paid to the contractor.

The sum of \$345.85 was spent for inspection and the sum of \$1,029.54 on various small structures, including the building of two retaining walls, one at the Guadalupe Street Bridge and the other at the Comercio Street Bridge.

As the law authorizing the construction of the bridges on road No. 1, San Juan-Ponce, did not include the construction of the bridge on road No. 3, Guayama-Ponce section, the legislature, in April, 1916, approved an act which provided for the construction of this bridge with the money left from the appropriation of \$75,000, approved in March, 1913. The two bridges built over the Portugues River have proven a great benefit to the city of Ponce, and outlying towns. Prior to their completion, traffic was often interrupted during the flood times, so that the city was not accessible from either road No. 1 or No. 3.

## BRIDGE OVER VEGAS RIVER, YAUCO-LARES ROAD.

As mentioned in last year's report, the construction of this bridge was included in the contract for the construction of the Yauco-Lares road, but the expenditure was to be paid from the \$25,000 appropriated for the construction of the bridges over Vegas and Duey Rivers, on the Yauco-Guayanilla road. This bridge was completed during the fiscal year 1916-17, at a cost of \$6,461.91, and during the fiscal year just ended the contractor was paid the 10 per cent retained, amounting to \$648.91.

## BRIDGES ON THE YABUCOA-HUMACAO ROAD.

Among the structures the cost of which is to be paid out of the \$2,000,000 road appropriation are the bridges on the section of road No. 3, between Humacao and Yabucoa, which rank eighth on the list of precedence approved by the economy commission.

On January 20, 1918, a contract was approved for the construction of two reinforced concrete bridges over Ingenio River and Cortadera Creek, for the amount of \$10,045.71. The first one over Ingenio River has a span of 9.50 meters, and the one over Cortadera Creek has a span of 6 meters. Work is nearly completed, and the bridges will soon be opened to traffic. The expenditure up to June amounted to \$8,432.37.

On February 11, 1918, another contract was let for the construction of a bridge over Yabucoa River, at a contract price of \$17,353.21. This bridge consists of two

10-meter reinforced concrete spans, the floor to be supported by steel beams incased in concrete. Very little headway has so far been made in its construction, on account of difficulties encountered by the contractor. The expenditure up to June 30, 1918, amounts to \$390.27 for surveys and inspection.

Another contract was approved in March 5, 1918, for the construction of the bridge over the Guayanes River, for \$18,400. This bridge is a reinforced concrete structure of three 10-meter spans on a wooden pile foundation, with the floor slab supported on reinforced concrete beams. The expenditure during the fiscal year just ended amounts to \$7,011.98.

There are still other water courses which make bridging on this same section necessary, but nothing can be done until the second issue of \$500,000 of road bonds are sold.

#### BRIDGES ON THE FAJARDO-CEIBA ROAD.

These bridges appear ninth on the list of precedence approved in 1916, to be constructed from the \$2,000,000 road appropriation.

On February 6, 1918, a contract was let calling for the construction of three reinforced bridges of 6, 10, and 10 meter spans, respectively, at a contract price of \$17,713. These bridges were nearly finished by June 30, 1918, and the total amount expended during the year is \$16,469. The need of these bridges, as well as of those between Ceiba and Naguabo, the construction of which is still pending, has been long felt, for traffic is often interrupted during the rainy period.

#### OTHER BRIDGES AND CULVERTS.

The other bridges and culverts appearing in the detailed statement of expenditures previously given were built with funds from the fiscal year appropriation for "Construction, maintenance, and repair of public roads and bridges," and are mentioned and briefly described under the general heading of "Maintenance roads and bridges," given elsewhere in this report.

#### MISCELLANEOUS EXPENDITURES.

The only expenditures of the year in work other than roads and bridges were \$825.37, expended in the work of changing the course of the Yaurel River, near Arroyo, from the \$1,000 appropriated by act No. 69, approved in 1916, and \$571.46, which were spent in the preparation of maps of the public-service railroads, which were required in order to comply with the provisions of "An act relating to the construction of public-service railroads in the easterly end of Porto Rico." The duties of the commissioner of the interior concerning the provisions of this act were discussed in the last annual report.

In accordance with the plans formulated by the commissioner of the interior and approved by the executive council, all owners of railroad lines included in said plans were notified in due time that all tracks laid on public property would have to be removed at the end of a year from the date of notice, if at that time steps had not been taken by the various owners to standardize the gauges of all narrow-gauge lines, and to convert them into public service railroads. The year thus given will end on August 28, 1918.

Up to this writing, the various companies affected by these plans have not taken any steps to comply with these requirements. It is not yet possible, however, to predict just what resolution will be finally adopted, until the year is over, and the action to be taken by the government and the owners of these lines is definitely known.

#### THE TWO MILLION DOLLAR BOND ISSUE.

Act No. 71 approved by the legislature on April 13, 1916, entitled "An act to authorize an issue of bonds of the people of Porto Rico in the amount of \$2,000,000 for the construction of roads and bridges, and for other purposes," provides that bonds in the amount of \$500,000 be issued at once and that additional bonds for \$500,000 shall be issued as soon as the proceeds of the first installment shall have been expended; the rest (\$1,000,000) shall be issued in such amounts and upon such dates as may be required to pay the construction expenses of the roads and bridges for which their issuance has been authorized.

The first \$500,000 were made available last year and, as already stated, work was commenced both on the surveys and construction of various roads and bridges. With the last contract awarded three months ago for the construction of a part of the Ciales-Juana Diaz Road, the total liabilities arising from the various contracts under performance absorbed practically the total amount of \$500,000, leaving a very small

margin which had to be set aside for meeting the expenses of a few surveying parties then engaged in location work, which necessarily had to be continued to completion. Therefore, no funds remained in reserve to continue contracting for additional work.

A request for the issue of the second installment was then made. The question then came up as to the interpretation of the word "expended" as used in the act. An opinion from the Attorney General was obtained to the effect that the word "expended" in this case should be construed as embracing the total liabilities arising under the contracts already under way and should not be limited merely to include the amount actually paid out to that date under such contracts.

Thereupon the executive council approved the issuance of the second installment, but the unfavorable conditions of the market have prevented so far the sale of the bonds.

This state of affairs has made it necessary to bring to a halt, temporarily, the contracting of any additional work and to curtail considerably the work of location surveys of the roads.

Too much can not be said to emphasize the necessity of urging the sale of this second issue of bonds at the earliest possible date. Otherwise, a discontinuance of the work will occur which would be seriously detrimental to the general scheme of construction already started, to say nothing of the prejudice caused to those agricultural zones which have for a long time been clamoring for communications with the rest of the island in order to market their products. Many years have elapsed since many of these roads tapping important zones were started, and on account of the small appropriations then available only short pieces have so far been constructed, and these are practically of no use because they are isolated and therefore do not afford communication with the rest of the system of roads.

As no trouble was anticipated at first as to the sale of these bonds, and as there was no doubt, therefore, that the money would be forthcoming as required to meet the expenditures, the program for the construction of the various works to be built with the \$2,000,000 was arranged on the basis that there should be no interruption in the work once started, and that the proper sequence could be followed as far as practicable to complete the various roads and bridges in the order of precedence established by the economy commission. A list showing this order was given in last year's report and is here repeated:

#### ORDER OF PREFERENCE—CONSTRUCTION.

1. Lares-Adjuntas Road.
2. Arecibo-Lares Road.
3. Chales-Juana Diaz Road.
4. Corozal-Barros Road.
5. Mayaguez-Maricao Road, through Las Vegas.
6. Yauco-Lares Road.
7. Viegues Road.
8. Bridges on the Yabucoa-Humacao Road, especially those of Guayanes and Ingenio.
9. Bridges on the Fajardo-Ceiba Road.
10. Bridges on Ceiba-Naguabo Road.
11. Maricao-Indiera Road (Vega de Maricao).
12. Naguabo-Juncos Road.
13. Morovis-Corozal Road.
14. Comerio-Cidra Road.
15. La Mota-Guaynabo Road.
16. Loiza-Juncos Road (10 kilometers).
17. Hormigueros-Mayaguez Road.
18. San Sebastian-Las Marias Road.
19. Utuado-Lares Road.
20. Barceloneta-Utuado Road through Mameyes.
21. Jayuya-Barros Road.
22. Comerio-Aguas Buenas Road.
23. Corozal-Virgen Road.
24. Utuado-Jayuya Road.
25. San Lorenzo-Batallas Road.
26. Cayey-Salinas Road.
27. Barros-Coamo Road (10 kilometers).
28. Road from San German to Las Vegas Road.
29. Road from Bayamon to Comerio-Aguas Buenas Road.
30. Bayamon-Toa Alta Road.
31. Road from Aibonito to Cayey-Salinas Road.
32. Anasco-San Sebastian Road.
33. Camuy-San Sebastian Road.
34. Loiza-Juncos Road (construction of the rest of the road).
35. Loiza-Alba Loiza Road.
36. Bridge over Valenciano River, Juncos-Las Piedras Road.
37. Bridges on the Humacao-Naguabo Road.
38. Bridge over the Bayamon River, Catano-Palo Seco Road.
39. Wooden bridge over La Plata River at Los Reyes Catolicos.
40. Bridge over Coamo River at the place known as "Paso de las Aguilas."
41. Cabo Rojo-Lajas Road, through Boqueron and Palmarejo.
42. Lajas-Guanica Road, with branch to port La Parguera.
43. Bridge on the Trujillo Alto Road.



The survey and construction work undertaken and now being carried out was therefore developed in such a way as to permit an uninterrupted progress toward the completion of each particular road or bridge. It happens, therefore, that the first \$500,000 have not only been drawn upon to meet the cost of surveying that part of the work to be carried out under this first installment, but also to pay for a large amount of survey work and projects made preparatory to proceeding with the construction, to be paid from the second installment of \$500,000. It is very logical that our activities could not be confined solely to one particular road, say the Adjuntas-Lares Road, the first one on the list, but had to be launched in a larger scale in order that both economy in the organization to execute and supervise the work and an early completion of all the work to be performed with the total amount of \$2,000,000 could be achieved.

To obtain any benefit, therefore, from the expenditure already incurred it becomes essential to undertake and complete the work scheduled under the second \$500,000. Not until then will the expenditures so far made appear materialized and warranted by the construction actually performed.

And the fact that a good part of these expenditures made on location surveys, such as the staking out preparatory to construction, will be lost if building operations are delayed too long, further illustrates the necessity of avoiding at present any long interruption in the work.

It can not be too strongly recommended, therefore, that the utmost expediency be exercised in this matter and that no effort be spared until the issue of bonds for the second installment has been sold.

At this point it is well to bring out the fact realized from the very first, that only a limited number of the construction items listed by the economy commission can possibly be undertaken, as, according to the very lowest estimates, the amount of \$2,000,000 will not be sufficient to carry us beyond the first 20 roads and bridges included in the list.

The policy of the department has been to develop the work with a view to starting construction as soon as possible on all of these 20 roads and bridges in due order. However, the possibility that the issue of bonds for the second \$1,000,000 may not be made for some time yet will cause the department to revise that policy and to confine our work to the first 10 roads, completing them entirely where possible, and carrying to a useful stage that portion of the longer and most costly ones which can be built with the funds available.

This department has given due consideration to such a possibility, as under the present circumstances difficulties may arise to prevent the sale of the bonds, and in that event it is suggested that, on the strength of the advanced stage of the work in hand, both construction and surveys, and the need already discussed of continuing it to completion, proper recommendations should be made to the legislature requesting the repealing of all acts making appropriations for public works which can not be carried out, either owing to their exceedingly high cost or because they are of secondary importance, and that proper legislation be passed whereby funds from the ordinary revenues of the insular government be applied each year in amounts sufficient to continue the construction of those roads and bridges listed under the loan, which no doubt were considered and are the most important public works, and their completion is most urgently needed.

#### APPROPRIATIONS RECENTLY MADE BY THE LEGISLATURE PROVIDING FOR CERTAIN CONSTRUCTION.

At the session of the legislature which convened in August, 1917, a number of acts and joint resolutions were passed making appropriations for the construction of various roads and bridges and for the upkeep of certain municipal roads which were to be turned over to the insular government.

Among these appropriations some of real importance may be cited:

Act No. 63, authorizing the commissioner of the interior to expropriate certain land for the construction of a road from the San Antonio bridge to the Martin Peña bridge, through Miramar and appropriating therefor the amount of \$100,000.

Act No. 75, declaring an insular road a section of a municipal road of Jayuya, and providing the amount of \$4,000 for macadamizing this road.

Act No. 76, appropriating \$20,000 for the construction of the Lajas-Guanica road.

Act No. 77, appropriating \$10,000 for the construction of a bridge over the Caguñas River on the Aguas Buenas road.

Act No. 78, appropriating \$15,000 for the construction of a concrete submergible bridge over the Río Grande de Loiza on the road between Caguas and Las Piedras.

Act No. 80, placing under the department of the interior the defense works at the Yaurel River, Arroyo, and appropriating therefor the amount of \$10,000.

Act No. 82, appropriating the sum of \$5,000 for the survey and construction of an artesian well in the island of Vieques.

Act No. 84, providing that Municipal Road No. 1 from the Toa Baja to Insular Road No. 2 be included in the general plan of roads and assigning the amount of \$5,000 for its immediate repairs.

Joint resolution No. 25, appropriating \$4,000 for the construction of a submergible bridge over the Trigo Ford, Rio Piedras River.

Act No. 7, approved February 21, 1918, appropriating the sum of \$5,000 for making the necessary survey and estimate for determination of the most suitable place for the construction of a bridge over the Rio Grande, Arecibo, to connect the city of Arecibo with the insular system of roads.

Unfortunately the commissioner has not been able to carry out the provisions of these acts, because, owing to what appears to be a correct interpretation of our new organic act, the funds available in the insular treasury shall be applied, after reserving the amount necessary to meet the fiscal year appropriations made by the legislature for the running expenses of the government, to the special appropriations, according to the time of their passage by the legislature and approval by the governor, unless the legislature has specifically provided that some should take preference over others." (Opinion of the attorney general, Mar. 28, 1918.)

This circumstance and the fact that there are still in force many other important appropriations passed by the legislature in previous years, the aggregate amount of which more than covers the available surplus in the treasury, has made it advisable to take no action and to leave the matter to the next legislature for decision. Two alternate solutions suggest themselves, one being to repeal those appropriations which are deemed less important in order to make possible others which are intended for work of more immediate need, and the other to levy a sufficient tax increasing the revenues to the extent required to meet all the appropriations made to date.

Nevertheless, realizing that some of the work contemplated under these acts is of an urgent character, for example, the preparation of a project for building a bridge over Rio Grande de Arecibo, to connect the town of Arecibo with the rest of the Border Road No. 2, leading to San Juan, and the construction of a bridge over the Rio Grande de Loiza, on Las Piedras-San Lorenzo Road, the department has decided to assign funds for these two works from the fiscal year appropriation for maintenance and construction of roads and bridges and has already taken steps to proceed with such work.

#### GRADING OF GROUNDS KNOWN AS EL ESCAMBRON.

This work, which is under the direction of the bureau of public works, is being done with the purpose of preparing a site for locating the dwelling houses to be moved out of the settlements of Hoyo Frio and Salsipuedes, on the outskirts of Puerta de Tierra, which settlements were gradually built up without any regard to municipal and sanitary improvements and without any permit whatever from the insular government, on land belonging to the latter and lying within the low marshy area bordering the San Juan Bay.

The extremely unsanitary conditions surrounding the houses in those settlements and the work of dredging the bay and reclaiming this lowland, which is to be commenced by the Federal Government, made it necessary for the insular authorities to take steps toward cleaning up these localities. This measure became more urgent under the pressing circumstances arising by reason of the construction of the military cantonment, Las Casas, just outside of the city, and now practically finished, where all the military forces drafted in the island will be quartered, which made indispensable the removal of any possible source of epidemics within the San Juan district.

The work was intrusted to this department, and action was immediately taken to proceed with the utmost speed. A force of 200 prisoners was at once requisitioned and the necessary equipment was procured.

Work was started about the middle of May, and by the end of June there had been excavated about 40,000 cubic meters of earth, which were used to reclaim the low marshy land existing within the site to be utilized for the new settlement. The progress of the work has come up to expectations.

The tract of land which is being graded covers an area of approximately 25 acres, is bordered on the north by the sea, and forms part of the military reservation in San Juan. It was ceded to the insular government temporarily for this purpose by the Secretary of War. The plan prepared for this improvement provides for about 500 small houses, with ample streets and with all the sanitary requirements, such as properly built public latrines, public water faucets, etc.

Funds for this work have so far been provided by the department of sanitation, and \$7,582.37 were expended to June 30. That department is deeply concerned with the

problem in hand, and has, therefore, rendered all possible help to carry out the work. For the building of sanitary improvements and for the moving of the houses and their setting up on the new site, which work is estimated to cost \$20,000, there is not as yet any money available. The matter is being looked into, however, and it is expected that this amount will finally be secured.

#### MAINTENANCE AND REPAIRS OF ROADS AND BRIDGES.

Commanding a considerably larger appropriation than in former years, the department was able this year to attend to long-needed work which had previously been left undone for lack of sufficient funds.

The appropriation for the year amounted to \$625,000, and it was expended as shown in the following distribution:

(a) Purchase and placing of stone for repaving macadam.....	\$288,172.73
(b) General cleaning and removal of landslides.....	37,175.28
(c) Road-menders' work.....	60,921.23
(d) Equipment, purchase, and repairs.....	40,172.39
(e) Bridges and culverts, construction, rebuilding, and repairs.....	85,205.23
(f) Retaining and protection walls.....	2,441.93
(g) Repairs to road houses.....	2,795.87
(h) Purchase and spreading of bituminous materials.....	9,885.00
(i) Field supervision and inspection.....	59,454.35
(j) General expenses.....	22,662.40
Total.....	608,886.41

This is the total amount paid out up to the date on which the books were closed for work performed, services rendered, and purchases made to June 30, 1918. The balance of the appropriation remaining outstanding is to meet the cost of completing the bridge over Cano Santiago on the Naguabo-Humacao road, the culvert known as Los Romanes on the Aguadilla-Lares road, on both of which structures there is yet to be done work aggregating about \$12,700; a stone contract on the Mayaguez-Sabana Grande section still pending performance in the amount of \$2,921; and payments for purchase orders placed during the year but not yet delivered.

#### ORGANIZATION AND PERSONNEL.

The following is a list of the personnel permanently engaged during the year in the work of road maintenance, whose salaries were paid from the appropriation of \$625,000.

This list does not include the engineer in charge of road maintenance and other assistants, whose salaries are included in the regular budget.

##### OFFICE FORCE.

1 chief clerk.	1 requisition clerk.
2 assistant clerks.	2 stenographers.
1 bookkeeper.	3 paymasters.

##### FIELD FORCE.

1 storehouse keeper.	234 road menders.
1 master mechanic.	7 police foremen.
1 traveling inspector.	10 road-roller drivers.
11 road overseers.	1 master mason.
5 assistant road overseers.	1 master carpenter.
37 section foremen.	1 corral boss.

The beginning of the year found the island divided into 10 maintenance districts, each district, comprising from 109 to 140 kilometers of road, being in charge of an overseer, who reports directly to the central office in San Juan. Five assistant overseers were assigned this year, one each to the districts of Rio Piedras, Ponce, Humacao, Aguadilla, and Utuado. These assistant overseers were employed with the double purpose of providing additional help to the overseers where the amount of work under way warranted it, and also to enable the organization to count on a number of men acquainted with the work who may be able when called upon to discharge the duties of the overseer. The length of road within a district is subdivided into sections about 30 kilometers long, each in care of a foreman, who works under the direction of the overseer.

On January 1, 1918, another maintenance district was established, covering about 80 kilometers of road within the territory surrounding the town of Manati, and with headquarters at this town. This district was formed by separating from the two adjacent districts of Bayamon and Arecibo those portions of road where the work could not be properly handled by the corresponding overseers on account of their being too far from their respective headquarters. These two districts of Bayamon

and Arecibo had besides increased in size to such an extent, with the additions of new roads built after they were established, that a readjustment became necessary if satisfactory inspection was to be secured.

The department furnished the overseers with the necessary equipment to make their inspection trips. With regard to this service the motorcycle appears to be the most convenient vehicle for this traveling, both because of its low cost of maintenance and operation and because it enables the overseer to cover more ground and make practically a daily inspection of his whole district. The nature of the roads in the interior of the island, however, and the health conditions of some of the overseers, who can not stand the riding on a motorcycle, make it advisable to limit their use to certain districts only, the others being provided with buggies and mules for the purpose.

During this year the overseers of the districts of Ponce, Guayama, Humacao, Manati, and Arecibo used motorcycles, and those of the districts of Mayaguez, Utuado, and Aibonito used buggies. In the district of Aguadilla the overseer used a motorcycle part of the time and part of the time a buggy, while the overseer of the district of Rio Piedras used his own Ford car, receiving therefor an allowance of 12 cents a mile.

The cost of traveling of the overseers during the year averaged \$4.81 per kilometer of road under maintenance.

As in the previous year a force of 234 road menders was constantly employed, each giving his daily attention to from 3 to 6 kilometers, this length depending on the traffic and condition of each section.

The road menders received a compensation of \$20 and \$25 a month, those along roads in the interior of the island, where prevailing wages are lower than along the coast, getting the smaller pay. A small increase in pay over that allowed last year made it possible to secure a more reliable and more stable type of laborer than that previously obtainable for the wage offered.

In accordance with the rules and regulations approved this year governing the service of road menders these were required to wear the uniform prescribed therein, and the order was duly and promptly complied with by every man holding the job. The wearing of a uniform by the road mender, who is by law vested with certain police powers, works to advantage in that it distinguishes him from the common laborer, and thereby places him in a better position to discharge his duties with relation to the public; it inspires the men themselves with certain esprit de corps, which adds to their efficiency and discipline and renders much easier the work of inspection by the supervising officials.

The rest of the personnel completing the field organization consists of the necessary police foremen to guard the prisoners in those districts where these are used on road work, and the necessary road roller drivers, 10 of which were permanently employed and the rest were taken on and off, as required, to man the 25 rollers owned by the department.

A master carpenter, a master mason, and a master mechanic were also permanently employed throughout the year, the master carpenter and master mason on construction and repairs of road structures by administration, while the master mechanic has direct charge of the department's shops in San Juan, where there is a number of mechanics always at work repairing road rollers, motorcycles, rock crushers, bridge parts, etc.

#### PURCHASE AND PLACING OF STONE FOR REPAIRING MACADAM.

By far the largest item of expenditure in road maintenance is the purchase of broken stone and its use in the macadam.

The quantity of broken stone requisitioned by the overseers as necessary for the upkeep of the roads during the year amounted to 155,618 cubic meters. Funds were rather limited, however, and this quantity had to be cut down, and the program of work was prepared on the basis of purchasing and placing close to 150,000 cubic meters; that is over 40 per cent more than the performance of the previous year, which so far had been the year with the maximum record. Calculations had been made counting on an appropriation that was \$95,000 larger than the total funds appropriated for the previous year.

This program had to be readjusted, however, to make room for the heavy demand made on the appropriation for defraying the cost of finishing the construction of certain bridges and reconstructing and repairing others, work which could be postponed no longer. As may be seen further on, the total amount expended on bridges and culverts reached quite a high figure; in fact, many times larger than that expended from the maintenance appropriation in any of the preceding years. The necessity for diverting funds for some of this work, for instance the bridge over Cano Santiago near Naguabo Playa, did not arise until the year was well advanced, and by that

time the storing up of broken stone along the roads had made considerable progress, this explaining why the purchase of stone was not greatly affected and a good amount of that estimated was actually acquired, while the work of placing it in macadam repairs had to be curtailed considerably to permit a transfer of funds to bridge construction. As given below, the number of cubic meters placed, although bettering last year's record, was 33 per cent less than what had been estimated at the time the first program for the work of the year was tentatively arranged.

Owing to delays incurred in calling for bids for furnishing stone, very little success was had in getting contractors to make favorable proposals on the necessary stone, with the result that but 33,612 cubic meters could be contracted for, which was only 27 per cent of the total quantity acquired during the year. This total amounted to 123,370.5 cubic meters and establishes a new record for this item.

The balance of 89,758.5 cubic meters was all obtained by administration as follows: 58,613 cubic meters by direct purchase in small lots each amounting to less than \$300, and the remaining 31,145.5 cubic meters were obtained using day labor.

This total quantity of 123,370.5 cubic meters cost \$212,002.19, or an average cost of \$1.72 a cubic meter. The average unit cost of the stone bought under contract was \$1.75, while that of stone obtained by administration was \$1.71.

The latter unit cost, however, does not include overhead expenses nor charges for depreciation of equipment, which if added will make it at least 10 cents higher than that under contract. This higher cost is, however, entirely justified by the fact that the stone furnished by contract was all in localities where quarries are near at hand and labor is not high, while the other stone was all hard to obtain and necessarily expensive on account of the long hauls required to deliver it where needed.

The increase in the cost of stone from year to year is worthy of note. Two years ago the average unit cost of stone purchased was \$1.43; last year this average went up to \$1.62 a cubic meter, and this year it rose to \$1.72, a difference in the last year of 10 cents a cubic meter, which means a draft of over \$10,000 more on the appropriation this year as compared to last year's expenditure. This rising cost of stone is explained by the growing increase in wages, in transportation cost, blasting materials, tools, etc. Ox carts have generally been used all over the island for the hauling of stone furnished for road work, but the increasingly constant use of oxen in the sugar plantations make them every day more scarce for other work. Motor trucks have therefore been resorted to in certain localities for hauling stone in an attempt to lower the transportation cost, and the results so far obtained point to an increase in their use in the future.

On July 1, 1917, there were on hand, left over from the previous year, 15,712 cubic meters of stone. This volume, added to the total acquired during the year, made a total available quantity of 139,082.5 cubic meters. Of this total, there were placed in repairing macadam 98,531 cubic meters, an increase of 2,057.9 cubic meters over last year's record, leaving a balance on hand on June 30, 1918, of 40,551.5 cubic meters.

The cost of placing stone averaged \$0.77 a cubic meter. This average cost is \$0.04 lower than that obtained last year, in spite of the fact that since last year wages have risen all over the island, and the price of fuel and lubricating oils, used in the road rollers, have gone up. The reason for this lower average unit cost is to be found in the fact that a considerable quantity of the stone used was placed by the road menders in repairing pits in the macadam, and this work appears charged under the item "Road menders' work." Also a fairly large quantity of softer stone than that formerly used was placed during the past year in those sections of road where the volume and kind of traffic did not warrant the heavy expense of procuring a harder material. The placing of this softer stone is of course less expensive and explains in part this lower average unit cost.

For the coming year it is the intention of the administration to make a more extended use of material of this softer character. There are roads where hard suitable stone is obtainable only at a price beyond our means while there are a number of quarries at hand where a soft rock can be had with good cementing properties and sufficiently tough to make a fairly solid macadam. Experience has shown that where traffic is light, this macadam wears down evenly and behaves better in every way than does the harder, scarce, and more expensive material, which as found near those roads is very poor in cementing properties, can not be crushed fine enough because funds are wanting, and therefore makes a macadam that ravels as soon as the top binder is worn off by the tires of automobiles and motor trucks. The softer rock does not produce, of course, a macadam with the lasting properties that does a harder stone, but with the money available this expedient solves the problem for the time being. If an appropriation twice the actual were available, then crushing plants could be established and 1-inch stone in proper quantities would be placed, thus building a macadam that would be satisfactory all around.

The total unit cost of stone purchased and placed was \$2.49 per cubic meter, as compared with \$2.43, the cost for last fiscal year.

One important feature about road maintenance work in this island is that of planning and making an effort to carry out the work of providing and placing all the stone required for the year during the first six months of the fiscal year, because during this period labor and climatic conditions are more advantageous for performing the work. The sugar-cane grinding season ends at about the month of June and it is then that labor can be hired and bull carts for hauling become available. The delivery of stone can then be expedited and can be made at lower cost than in the dry season, which coincides with the harvesting of the sugar crop. The placing of stone in macadam can then be started at a suitable time and prosecuted at a rapid rate during the wet season, when plenty of water to bind the macadam is available.

The labor situation this coming year will be still harder to meet when the grinding season starts, on account of the shortage of men caused by the draft into military service, and the movement now under way to transport a large number of laborers to the mainland to be employed on war work.

These facts were taken into account in planning work for next year. A paper distribution of all the stone estimated to be purchased was made in March, a call for bids was advertised during April, contracts were awarded in May, and the beginning of June found the contractors with the work organized and proceeding with it at a fair rate. Having thus arranged for the delivery of stone, there is no doubt that the work of placing it will be done to schedule, and very favorable results will be obtained.

#### GENERAL CLEANING AND REMOVAL OF LANDSLIDES.

Under this item is included the cost of keeping the side ditches in good régime and building new ones, regrading shoulders, trimming slopes, weeding the grass, all other cleaning incidental to a road work, and the removal of landslides.

The amount of \$37,175.28 reported under this heading does not quite represent the total amount spent on this class of work. The road menders attend to a considerable part of such work as is not urgent and which can be conveniently cleaned up in the course of their daily work. Their time thus spent appears charged under the item "Road menders' work."

This amount, therefore, represents only the cost of that work which had to be rushed to completion, or was of such a volume that the road mender alone could not dispose of it, and an auxiliary gang of men had to be employed.

Removal of landslides and cleaning of ditches after heavy rainstorms, such as repairing the damages caused by the rainstorms which occurred all over the island during the last two weeks in November and which required an immediate expenditure of \$3,800; removing the grass that has accumulated during wet weather faster than it could be cut by the road mender, are items coming under this class.

The total of \$37,175.28 here reported was expended as follows: \$14,324.05 in the construction of ditches and trimming road shoulders and side slopes; \$14,539.48 in general cleaning work, and \$8,311.75 in removing landslides.

#### ROAD MENDERS' WORK.

The road mender is charged with the duty of performing that work which requires daily attention to preserve the roads in good régime. His first attention, therefore, must be given to work of an urgent character, such as the cleaning out of all obstructions that may be formed in the side ditches by the accumulation of silt or débris from landslides, and opening those drains which may be necessary to carry the water off the roadway. Next to this comes the work of maintaining the surface of the macadam in a smooth condition by promptly repairing all pits that may form, and filling up depressions which make traveling uncomfortable.

This work done he then puts in his time weeding the road shoulders, side ditches, and slopes, and doing cleaning work in general, including the cleaning of the waterways in road structures. He is required to patrol his section every day, and the last day of the month is devoted to the planting and cultivation of shade trees along the road sides.

The year's work done by this force of men cost \$60,921.23, and results have been so gratifying that the program for the coming year has been prepared increasing their number from 234 to 360 men, which number permits a distribution of one road-mender for every 3 to 4 kilometers of road.

#### PURCHASE AND REPAIRS OF EQUIPMENT.

At the beginning of the year the equipment on hand consisted mainly of 23 road rollers, some of them needing extensive repairs; several ox-drawn rollers; three installations of rock-crushing plants; one small portable crusher, and parts of two other crushers

which had been out of use for the last five years. There was practically nothing in the line of sprinkling carts, and our supply of tools was rather limited, so much so that the work was somewhat delayed at first by the lack of picks, shovels, and other tools.

During the year this equipment was increased as much as the money available would permit. Two new road rollers were bought at a total cost of \$7,216.78, and six sprinkling carts were purchased for \$3,718.57. Repair parts for steam and gasoline rollers were also obtained costing approximately \$6,000.

The amount of \$5,656.61 was spent in the purchase of tools; \$2,200 were spent on provisional repairs made early in the year to the steam crusher plant at kilometer 20, Rio Piedras-Caguas road, and in the complete reconstruction of the whole installation later on. The balance making up the total amount of \$40,172.39 under this item was paid for repairs on road rollers, which were practically made new, minor repairs to other road rollers, running expenses of the shop in San Juan, salary of the master mechanic, and other miscellaneous charges coming under this classification.

At this point it should be mentioned that the department is in need of increasing its equipment to a considerable extent in order to meet the requirements of the work in hand, but is prevented from doing so by the want of funds, being thus compelled to continue making the best possible use of what there is available, unquestionably at the expense of economy.

Our aim is to increase the number of road rollers so as to have one available for each road section, each consisting of about 30 kilometers of road; one sprinkling cart for each roller, and also to get a number of light portable rock crushers. Our repair shop in San Juan is also lacking certain machinery to better handle the work it has to turn out. This program is slowly being carried out by purchasing every year part of what is needed and keeping under repair the old equipment.

#### CONSTRUCTION, REBUILDING, AND REPAIRS OF BRIDGES AND CULVERTS.

Several new structures were completed this year, the most important, because of their size, being the bridge over the Bayamon River on the new Santurce-Bayamon road, and the bridge over Cano Santiago, on the Naguabo-Humacao road. Of a total of \$85,205.23 expended on road structures, \$66,308.34 went to new construction.

The bridge over the Bayamon River had been partly built during the previous year with a special appropriation which became exhausted about the month of April, 1917, and all work was stopped. The construction was not resumed until the beginning of this year when funds were assigned for its completion from the fiscal year appropriation for maintenance and construction of roads and bridges. It was entirely finished this year and opened to traffic on January 9, 1918. The amount expended during the year from said appropriation amounted to \$22,087.20, as given in the statement of expenditures for new constructions appearing at the beginning of this report.

Over Cano Santiago there was an old wooden bridge, with a span of 60 meters which had deteriorated to such an extent as to make traffic over it rather dangerous. The rebuilding of this bridge was included in the list of new works to be constructed from the funds provided by the \$2,000,000 bond issue authorized by Act No. 71 of 1916, but owing to the impossibility of obtaining an allotment from those funds on account of this bridge being too far down the list establishing the order of precedence for carrying out these works, it was decided to pay for it from the fiscal-year appropriation for maintenance. Up to the date the books were closed there had been paid on this bridge, as part payment on contract, \$12,311.58.

Other new constructions were made as follows:

A bridge over Quebrada Angostura, on the Manati-Arecibo road, and the relocated portion of the road for its approaches, with an expenditure to date of \$6,822.04.

A 6-meter span culvert and embankments of approach, on the Caguas-Aguas Buenas road. The total cost of this work was \$2,666.20 including inspection. The department defrayed expenses to the extent of \$2,286.20 and the balance of \$380 was made up by local interested parties who contributed part of the material employed.

Three reinforced-concrete bridges on the road from Las Cruces to Cidra, at a contract cost of \$5,568.59.

Four reinforced-concrete culverts on the Mayaguez-Anasco road, at a contract cost of \$1,753.96.

Four reinforced-concrete culverts built at the places known as Calvache and Ferrer, on the Aguadilla-Anasco road, in connection with the raising of the grades of these portions of road above flood waters. These culverts cost \$3,100.

A reinforced-concrete culvert over Quebrada La Fe on the Naguabo-Juncos road, at a contract cost of \$1,795.

A reinforced-concrete bridge at the place known as Ponton Garcia, on the Aguadilla-Lares road. The amount of \$1,193.73 was paid from the maintenance appropriation as part cost of the bridge.

Reinforced-concrete culverts on the road under construction in the island of Vieques. Part cost of these culverts to the extent of \$2,823 was paid from maintenance funds.

There were also built a number of pipe and short-span box culverts aggregating a total of \$6,566.97.

A number of structures were rebuilt during the year, reaching a total cost of \$5,858.58, divided as follows:

Changing the wooden floors of the culverts, at kilometers 37 and 42, Yauco-Sabana Grande road, each 6-meter span, by reinforced-concrete slabs, and reinforcing the abutments, at a cost of \$2,576.38.

Rebuilding entirely of reinforced concrete two old wooden culverts at kilometer 11, Mayaguez-Las Vegas road, at a cost of \$2,287.76, and reconstructing a wooden bridge over Quebrada Calderon on the Loiza road, at a cost of \$994.44.

It is the policy of the department to gradually convert into more permanent structures the temporary wooden bridges of which there are quite a number in the insular roads. Following this program, every year a number of these bridges, to the extent that funds assigned for this purpose permit, are reconstructed with concrete.

The amounts expended on repairs aggregated a total of \$13,038.31. Most of these repairs were made on wooden bridges, but some other important work was carried out as shown in the following account:

Repairs to San Antonio Bridge were made early in the year. The railing, which had rusted and practically disappeared, was substituted by a galvanized-iron pipe railing; the cantilever steel frames supporting the sidewalks were repaired and remodeled, using a concrete casing around each bracket to give them the appearance of a new reinforced concrete design, and the steel plates forming the floor of the sidewalks were replaced by a thin reinforced-concrete slab. This work cost \$2,200.

Several steel bridges were painted at a cost of \$3,324.80.

The balance of \$7,593.51 making up the total expended under this classification, was used in minor repairs of wooden bridges and culverts.

#### RETAINING AND PROTECTION WALLS.

Only a small amount of work of this class was done during the year. The total expended was \$2,441.93 and this covered the cost of a combined protection and retaining wall built against the left bank of Quebrada Pitahaya, Rio Piedras-Fajardo road, at a place adjoining the highway bridge, where the draw threatened to cut through the road and isolate the bridge, and another protection wall at kilometer 35.3 Vega Alta-Vega Baja road, where the Cibuco River scoured its banks and caused a cave-in of the road.

Materials were also bought for building a protection wall to prevent the Salinas River from further encroaching on the road just outside of the town of Salinas, but the work could not be performed for lack of funds late in the year, and was postponed until funds from the new fiscal year appropriation become available.

#### REPAIRS TO ROAD HOUSES.

The department owns a number of road houses, 47 in all, which were built during the time of the Spanish government when the roads were constructed. These road houses are spaced about every 6 kilometers and were intended for, and have since been used, as living quarters of the road menders.

During the time that has elapsed since they were built very little repair work has been done on them with the result that many of them have deteriorated considerably and some will have to be entirely rebuilt.

For the last two years an effort has been made to begin placing these houses in good condition, and repairs have been made to the extent that funds available have permitted. This work should be done on a larger scale, but the small amount that can be assigned to it prevents this being done. This last year \$2,795.87 were spent on such work, but only six of these houses, located between San Juan and kilometer 17, road No. 1, have so far been repaired.

It is intended to continue this work every year with whatever funds can be allotted. As previously stated, there are only 47 road houses, and with the number assigned to road menders only about 50 of these can be lodged. From the moment that the scheme of employing road menders for the maintenance of roads was again put in practice two years ago it was realized that houses should be provided, for it is almost indispensable for good and efficient service that the road mender should live within the section assigned to him, and this requirement can not be met unless houses are provided for the purpose. There are sections of road in the island where for miles no



suitable house is to be found with the consequent inconvenience that the road mender has to travel a long distance from his place of living to the point of work.

It is along these sections of road that houses should first be built. Wooden houses should be constructed if no money is available for a more permanent building.

This need is fully realized by the administration but to the regret of all concerned funds assigned by the legislature are only just sufficient to cover the cost of making repairs to keep the roads in a reasonable condition, and very little margin, if any, is left to take care of other work which is closely related, and, in fact, is essential, to the success of road maintenance.

#### PURCHASE AND SPREADING OF BITUMINOUS MATERIAL.

During the past year the bituminous pavement in use in the section of the military road from San Juan to kilometer 12.3, just past the urban zone of Rio Piedras, was extended as far as kilometer 18.3. The section of road between San Juan, Rio Piedras, and Caguas, is one of dense and heavy traffic and bare macadam surface can not resist it. The aim sought by the administration is to cover this whole section with a bituminous coat, which the experience of several years on the San Juan-Rio Piedras stretch has demonstrated to give adequate results if properly maintained.

A total length of 5 kilometers was surfaced with a bituminous coat this year, with a total cost of \$5,455. This represents a cost per kilometer of \$1,091 and a cost per square meter of \$0.207. The cost per kilometer is over twice what was reported last year, as the cost of resurfacing part of the San Juan-Rio Piedras section, but the difference is explained by the increase in the cost of the bituminous material, which the previous year was purchased at 7½ cents a gallon while this year the price paid jumped up to 19½ cents a gallon, and by the rise in cost of stone screenings.

In the maintenance of the 12 kilometers out of San Juan there was expended \$1,800 on bituminous material and \$2,000 on stone screenings. This cost represents an annual expenditure of approximately \$316 per kilometer. The work of placing the material in the pavement is done by the road menders and is not included in this cost.

The total amount which appears expended under this general item also includes the purchase of approximately 9,000 gallons of bituminous material remaining on hand on June 30.

The section of road between Ponce and Ponce Playa, which is also maintained with a bituminous pavement, is to be resurfaced the coming year, using natural road asphalt. Bituminous binder, class A, 1911, New York State specifications, which is the kind used satisfactorily around San Juan, has been used in Ponce for the last four years but with very poor results. The continued drought and hot weather prevailing in that part of the island appear to have a rapid deteriorating effect on this material, causing the oil ingredients to volatilize. As a consequence, the pavement is soon rendered dry and brittle and rapidly goes to pieces under the heavy steel-tire traffic passing over that road.

A test was made this year with natural road asphalt, and very gratifying results were obtained. Although the cost per gallon of this material is about 10 cents higher than that of the bituminous binder previously used, its use turns out to be less expensive because 1 gallon of it can cover about twice as much surface as does a gallon of bituminous binder.

#### FIELD SUPERVISION AND INSPECTION.

Under this item are included the salaries of the 37 permanent road foremen employed throughout the year, whose pay amounted to \$18,122.43; the salaries of 1 traveling inspector, 11 overseers, and 5 assistant overseers, amounting to \$21,326.82, and the traveling expenses and per diems of the supervising official, traveling inspector, 11 overseers, and a paymaster, with a total cost of \$20,005.10. In all, \$59,454.35.

This amount represents an average cost of \$51.52 per kilometer for supervising and inspecting the total length of 1,154 kilometers of road under maintenance last year.

#### GENERAL EXPENSES.

Under this heading have been grouped the total paid for salaries of the central office clerical force, employed exclusively in connection with road maintenance work, which salaries amounted to \$6,521.33; miscellaneous expenditures incidental to the maintenance work in general and not directly chargeable to any particular class of work like the purchase of kilometer posts, providing warning signs for road rollers, rent of houses for offices of overseers, etc., amounting to \$13,305.90; and the caring for and feeding of the 60 mules owned by the department, which this year cost \$2,835.17. This amount covers only the expenses caused by the mules during their idle time, the rest of their expense being charged directly to the work in which they are used.

The total disbursements under general expenses was \$22,662.40.

## TOTAL EXPENDITURE FOR AND COST OF ROAD MAINTENANCE.

The expenditure for road maintenance for the 1,154 kilometers of completed roads average this year \$527.63 per kilometer. This average is 16 per cent higher than the expenditure for the previous year. This increase was possible by reason of the larger appropriation provided for this year, which permitted the accomplishment of the large volume of work on new construction and rebuilding of road structures noted in the preceding pages, and more extensive repairs made to the macadam in an effort to restore to good condition those portions of road which were not properly attended during the previous years because of the small appropriation then available.

As stated elsewhere in this report, there was also made a large expenditure in the purchase of equipment which has long been needed and is now becoming indispensable for the work in hand.

## RECOMMENDATIONS.

Although seemingly large, as compared with the appropriations allotted in previous years for the work of road maintenance, the amount of \$625,000 available for the past year is considerably below what is actually required to properly meet the needs of road maintenance. More money is needed, and no matter what efforts are made results will not begin to show until a sufficient amount is appropriated permitting an expenditure of at least \$700 per kilometer for the approximately 1,200 kilometers of road which will be under maintenance by the end of next year with the additions of the new constructions under way.

Experience has demonstrated that the road macadam in this island only lasts an average of three years, which means that about 400 kilometers of road have to be entirely resurfaced every year, this requiring no less than 160,000 cubic meters of broken stone. This is the quantity of stone that should be furnished and placed in macadam yearly to maintain the roads properly, which, at the price of \$2.50 per cubic meter of stone delivered and placed, means an annual outlay of \$400,000.

Another item for which funds should be liberally assigned is that pertaining to the construction and rebuilding of road structures. As already noted in this report, the number of frail wooden structures existing in the roads of this island is quite high and large expenditures are yearly required for their repairs. All these bridges should at the earliest opportunity be transformed into more permanent structures. Such an improvement will mean a much decreased annual cost of upkeep, and would also make available for heavier traffic those roads from which it must at present be barred on account of the small resistance of such wooden bridges.

In conclusion there should be emphasized the immediate need of appropriating at least \$900,000 for the fiscal year following the next session of the legislature, the increase over this year's appropriation to be expended in the following items:

(1) The purchase and placing of about 50 per cent more stone for repairing macadam than is possible at present.

(2) To increase the number of road menders.

(3) To buy more road rollers.

(4) To purchase needed machinery, sprinkling carts, and tools.

(5) To build about 300 road houses that are needed for the road menders.

(6) To build houses for the road foremen and overseers.

(7) To build small sheds for storing tools at convenient places in the various road sections.

(8) To better the wages of laborers so as to place the government above the subordinate position it now occupies in regard to hiring reliable and efficient labor because of the small wages now paid.

(9) To reconstruct with concrete the wooden bridges on those roads which, on account of the present structures, must at present be closed to motor-truck traffic.

(10) To build bridges which are badly needed.

(11) To attend properly those stretches of municipal roads recently declared insular roads by the legislature and consequently turned over to this department for their upkeep.

(12) To build permanent camps for prisoners with all the sanitary qualifications in those sections of roads where convict labor is used.

(13) To purchase a certain number of motor trucks for hauling stone with the purpose of experimenting as to their cost as compared to other means of transportation.

(14) To buy two more automobiles which are at present urgently needed for the traveling which is required of the maintenance engineer and inspector in order to properly supervise the work placed under the care of the department.

(15) To make arrangements to pay all the laborers employed by public works all over the island every week instead of semimonthly as is now done. The semimonthly payment causes a great deal of inconvenience to the service, as very few laborers are found, and these not of the more desirable class, who are willing to work for public

works on this account. Anywhere else—in sugar centrales, for instance—they are paid every week. In some localities we have already been forced to arrange for the weekly pay, as no labor could otherwise be obtained. Such an arrangement necessarily entails greater expenses in employing additional personnel to handle pay rolls, and also for the larger amount of traveling required.

(16) A larger assignment is also needed for extending the asphalt pavement on those sections of road leading to and in the neighborhood of San Juan where traffic is regularly heavy and bare macadam surface can not stand the wear and tear.

#### CONSTRUCTION AND MAINTENANCE OF MUNICIPAL ROADS.

The island is divided into 76 municipalities, 72 of which are included under Class II and III. As provided by law, all construction and maintenance work of municipal roads done in municipalities of these two classes, and where individual cost exceeds the amount of \$200, must be under the supervision of the commissioner of the interior.

A record is therefore kept in this department of all expenditures authorized and incurred in such works; plans and estimates for new construction are passed upon by this office and likewise its approval must first be obtained for all contracts for work and appointments of the personnel employed on administration work.

Due to the fact that the yearly budget for this department does not provide for personnel to supervise the construction and maintenance of such roads, this work is entrusted to the road overseers of the different districts, and, as these employees have little time to spare from their regular work, the supervision of the department is practically confined to the approval of plans, estimates, expenditures, and appointments of personnel.

The following table shows the extent of new dirt roads built during the year in those municipalities which undertook such work.

#### *Dirt roads built.*

Municipality.	Length in kilometers.	Cost.
Aguada.....	0.2	\$108
Guayama.....	1	773
Guaynabo.....	.7	523
Juana Diaz.....	1	76
Lajas.....	4	1,207
Las Piedras.....	4	1,400
Salinas.....	.3	530
Utua.....	.5	600

Only six municipalities did any work in improving roads by providing them with a macadam surface, as is shown in the following table:

#### *Roads macadamized.*

Municipality.	Length in kilometers.	Cost.
Guayama.....	6.7	\$1,676
Guaynabo.....	.3	171
Juana Diaz.....	.75	57
Rio Piedras.....	.9	812
Salinas.....	.3	550
Guanica.....	8	372

The amount of \$2,341 was expended on the construction of new road structures as shown in the following statement:

Municipality.	Kind of structure	Cost.
Aguada.....	Repairs to the piers and abutments of a bridge.....	\$680
Do.....	Two reinforced concrete culverts.....	58
Barros.....	Two wooden culverts.....	30
Cidra.....	Five wooden culverts.....	54
Guayama.....	10-meter span steel and wooden bridge.....	600
Do.....	10-meter span wooden bridge.....	
Juana Diaz.....	One reinforced concrete culvert.....	50
Cabo Rojo.....	Two concrete pipe culverts.....	25
Las Marias.....	Five concrete pipe culverts.....	100
Moca.....	Two reinforced concrete culverts.....	60
Rio Grande.....	Repairs to a wooden bridge.....	85
Salinas.....	10-meter span wooden bridge.....	629
Total.....		2,341

In maintenance and repairs of municipal roads there was expended by the various municipalities during the year an aggregate amount of \$43,697. This expenditure is relatively low compared to the total of work accomplished, and is explained by the fact that the municipalities received considerable help from the various property owners bordering on the roads, who naturally were deeply interested in the maintenance of such roads.

The municipal roads play a very important rôle in the system of communications of the island, serving as the lateral channels for the transportation of agricultural products into the main insular roads on their way to the market.

The department keeps an official register of all such roads which, after the procedure specified by the law, have been duly declared municipal roads. A description of each one of these roads is kept in this register.

During the year 59 new municipal roads were registered. These roads are not really new ones but are old cross-country lanes of travel which have been used for some years, but which up to the present had not been classified as municipal roads.

In connection with this work the department is every now and then called upon to make investigations concerning claims as to whether a certain road is private or municipal, which claims arise from misunderstanding either on the part of the public or of the owner of property traversed by this road, who may desire to close it to public use.

The intervention of the department, however, in these cases must be limited to enforcing the observance of rights based on facts which are definitely known from the description of the road appearing in the record. In cases where the description is obscure and can therefore be of no use to settle the matter, the question has to be taken to the courts for decision.

During the year landing slips and a new ferryboat were built for crossing the Bayamon River for the benefit of the users of the municipal road connecting the towns of Catane and Toa Baja. The expenditures incurred in this work, which amounted to \$636, was shared equally by this department and the various property owners near Toa Baja who use this road as their only outlet to the nearest insular road.

#### SURVEYS AND PROJECTS FOR NEW ROADS.

At the beginning of the fiscal year the field and office force engaged in the work of surveys and projects for new roads was distributed as follows:

*Field force.*—Nine survey parties were in the field:

Two parties on location of the Lares-Adjuntas Road.

One party completing the location of the Arecibo-Lares Road.

One party working on the preliminary and final location of a portion of the Ciales-Juana Diaz Road.

Two parties completing the location of the Corozal-Barros Road.

One party completing the survey of the final stretch of the Mayaguez-Maricao Road, via Las Vegas.

One party on the location of the Vieques Road.

One party on the Corozal-Morovis Road.

*Office force.*—The office force consisted of 12 draftsmen, 1 computer, and 1 stenographer, all working on the mapping of surveys and in the preparation of plans and estimates for 5 kilometers of the Lares-Adjuntas Road; 9 kilometers of the Arecibo-Lares Road; 11 kilometers of the Ciales-Juana Diaz Road; 6 kilometers of the Yauco-Lares Road, and 2 kilometers of the Vieques Road.

*Lares-Adjuntas Road.*—The two parties detailed for this work started their work, one from the Lares end, beginning at Rio Blanco, and the other at kilometer 33 of the Ponce-Arecibo Road, 3 kilometers distant from Adjuntas, which was the point previously selected for the connection of both roads.

Only one practicable route can be followed from the Adjuntas end and that is the one which starts at the point already mentioned on the Ponce-Arecibo Road, crosses the Rio Grande de Arecibo below its junction with the Rio Vaca, and then follows the hillsides leading up to the gap known as Maldonado in the divide between the watersheds of the Rio Grande de Arecibo and the Anasco River. From this point it descends the slopes forming the watershed of the Limani River, crosses the Yahuecas River below its junction with the Limani River, and follows on toward Lares. The stretch here described covers a distance of 10 kilometers. The first 5 kilometers are now under construction. The location of the other 5 kilometers was completed and the field notes are being plotted in the office.

The location of this road from the Lares end had to follow the route already fixed by the stretch of road of 12 kilometers constructed some years ago, which was built along the right bank of the Blanco River, so that the location had to be confined to

this same side until a favorable site for crossing the river with a bridge was found. The stretch located at this end is about 5 kilometers long, and plans and estimates have already been prepared ready to call for bids when the funds are made available.

The route to be followed for the location of the rest of the road connecting the stretches already described can not be definitely determined until several preliminary lines are run to get the necessary data to select the most advantageous location, all points being considered. The topography of the land and considerations of the most desirable location to better serve the territory traversed make the selection of the route to be followed a complicated problem. Several routes are possible, and all of them must be carefully studied and analyzed to be able to arrive at the most favorable solution.

The extension of country that must be tapped by this road comprises the watersheds of the Blanco, Limani, Guayo, and Prieto Rivers. It is all under cultivation and is worthy of being served by an easily accessible road.

This criterion and the topographical features of the land, which are very irregular in that part of the country, made necessary a long detour of the line toward the southwest, away from the general direction of the road. The route decided upon leaves the Rio Blanco and climbs to the pass named Puig in the divide of the watersheds of Blanco and Guayo Rivers; it descends to the Guayo River to give access to the plantations found in this watershed; it climbs again to pass the divide of the Guayo and Prieto Rivers through the gap known as De Polo, and from there it follows the location made some years ago leading to the place known as Plan Bonito, from which it descends toward the Rio Guayo. It rises again to the divide between the Guayo and the Limani River and descends over the watershed of the latter to cross the Yahuecas River, where it meets with the stretch located from the Adjuntas end, previously described.

The final location of this intermediate portion, and all the data relative to the territory traversed, is about to be completed.

From Plan Bonito down to Yahuecas River the work has been limited to running several preliminary lines, which, together with all the data relative to the characteristics of the land to be served, will be carefully studied before final selection is made.

*Arecibo-Lares Road.*—The location and construction plans of the 5 kilometers of road, from kilometer 19, the end of the stretch built some time ago, to kilometer 25, were completed last year.

The survey and final location of the remaining stretch of 9 kilometers up to Lares were continued and completed during the year, construction plans and estimates were subsequently prepared, and construction is now at an advanced stage.

*Ciales-Juana Diaz Road.*—Most of the work done during the year on this road, which is No. 3 in the order of preference, was directed to completing the location of the portion between Juana Diaz and Villalba. The surveying party which was working on the Cialitos side of this road was transferred early in the year to the Juana Diaz end to help the party working at that end to expedite the work. The stretch between Juana Diaz and Villalba was divided into two separate parts, one between the place known as Destierro and Villalba, which was located first, and the other from Destierro to Juana Diaz, which was completed later. The part between Destierro and Juana Diaz utilizes the piece of road of about  $3\frac{1}{2}$  kilometers in length which was built eight years ago by the irrigation service as an insular road to replace that part of the municipal road which was flooded by the Guayabal Reservoir.

From Guayabal—that is, at the end of the  $3\frac{1}{2}$  kilometers mentioned—the road follows an entirely new location, which required the running of several preliminary lines. Opposition on the part of some of the property owners to allowing the crossing of their land on that part of the road approaching the town of Villalba made it necessary to make several preliminary locations in an attempt to meet their objections.

When the location between Villalba and Juana Diaz was finished, one survey party was detailed to get additional data for completing the plans to continue the construction of that portion between the quebrada Maria Olaya and the main divide along the central range of the island. From the divide down to Toro Negro, a distance of 5 kilometers, the location of this road was made several years ago, and the projects were prepared with the exception of 4 large culverts and 19 pipe culverts, for which additional field data will be required in order to prepare the necessary plans for these structures.

*Corozal-Barros Road.*—The location surveys for this road, which were started from the two ends of the line, were completed this year, meeting at the Matacana or Manati River, with a total length of 33 kilometers. A project was prepared for the construction of  $2\frac{1}{2}$  kilometers, one-half kilometer next to the town of Corozal, and 2 kilometers beyond a stretch of 6 kilometers following the one-half kilometer mentioned, which

were built some time ago. A project for rebuilding the 6 kilometers mentioned was also prepared during the year.

The rest of this road has been divided into three sections for the purpose of construction, and projects are being prepared for building these sections, which comprise a total length of 25 kilometers; that is, one of 7 kilometers (kilometers 8-15), another of 9 kilometers (kilometers 15-24), and the other of 9 kilometers (kilometers 24-33).

*Mayaguez-Maricao Road, via Las Vegas.*—Of this road there remained to be built 6 kilometers, the survey of which was finished last year. A project was prepared for the construction of 3 kilometers, for which contracts were let shortly afterwards, and the work is now nearing completion.

The project for the remaining 3 kilometers is already finished and ready to start construction.

*Vieques Road.*—The survey work for the location of this road was continued this year only to kilometer 10, which is as far as the road is to be immediately constructed. This work was completed early in the year, and since then those relocations which have later appeared advisable have been made by a transitman who takes care also of the staking out for construction as the work progresses.

*Corozal-Morovis.*—The Corozal-Barros Road for the first 4 kilometers follows a route which can be utilized very conveniently in common with the road leading to Morovis. The location of the Corozal-Morovis Road was therefore started beginning at kilometer 4 of the Corozal-Barros Road. From this point it descends to the Cibuco River, then rises to pass the divide between the watersheds of this river and the Carreras River, from where it descends toward the latter river. At this point the work was stopped with a total distance of 5 kilometers so far located.

The stretch between Rio Carreras and Morovis, which is estimated to be about 5 kilometers long, remains to be surveyed.

*Yauco-Lares Road.*—This road, which is planned to provide a continuous direct route from the town of Yauco to the town of Lares, will follow the entire length of road No. 16, which leads out of Yauco and of which 15 kilometers have already been built and 6 are under construction; part of projected road No. 14, as far as the place known as Bartolo, where this road joins the Adjuntas-Lares Road, and from this point on to Lares over the latter-mentioned road.

The survey for the location of this road was continued during the year. Surveys were made from kilometer 21 to Carrizales, which is a point in the main divide of the central range, and from that place the surveyed line descends to the Rio Prieto, where it joins a piece of road partly built years ago, leading from this river to the place known as Plan Bonito, previously mentioned in connection with the Adjuntas-Lares Road.

The stretch located beyond kilometer 21 has a length of 10 kilometers, and it has required the running of several preliminary lines and a careful study to select the most convenient location. It crosses very fertile land, rich in plantations, and at the same time the topography of the ground is quite irregular.

*Maricao-Indiers Road.*—The survey for this road was started last September and the stretch of 5 kilometers between the town of Maricao and the crossing of the Rio Guaba was completed during the year. Alternate preliminary locations had to be made for the purpose of selecting the one route which would best serve the purpose and at the same time meet the objections and desires of the owners of property to be traversed by the road. All the field data and necessary information is at hand for the preparation of projects and construction.

*San Antonio-Martin Peña Road.*—The project for the construction of a road 20 meters wide between San Juan and Martin Peña via Miramar, to relieve the congestion of traffic existing in the only road which at present leads out of San Juan, has been an improvement widely advocated for some time.

On March 11, 1909, an act was passed by the legislature and approved by the governor, "to authorize the commissioner of the interior to survey and construct a section of road which, starting at San Antonio Bridge, shall terminate at Martin Peña Bridge, parallel to the military road and on the south side thereof." For this work the sum of \$60,000 was appropriated.

Up to last year only preliminary surveys had been made with a total expenditure of \$1,866.64. No further work was attempted on this road, owing to the fact that the amount appropriated was too small compared to the total estimated cost of the road, as is demonstrated by the fact that one single item alone, that of the right of way and indemnity for the houses to be moved out or demolished to make room for this road, is estimated at \$80,000; and also because there were not funds in the treasury available to meet the expenditures of the appropriation.

Last December the legislature again took up the question and passed an act "authorizing the commissioner of the interior to survey and expropriate a certain section of

land for the construction of a road beginning at the San Antonio Bridge, municipality of San Juan, and ending in the Martin Peña Bridge, which land lies between the railroad and the military road, and for other purposes," appropriating therefor the amount of \$100,000.

Thereupon the survey work was again undertaken and continued to completion. The location finally adopted follows a line which, starting at the San Antonio Bridge, immediately turns to the south, crossing the double tracks of the street railway and continues through the zone occupied by the tracks of the American Railroad Co. (which latter tracks will have to be moved to one side) up to the point where the road intercepts Congreso Street in Miramar; it then follows this street all the way through Miramar, makes a slight turn and follows straight on, crossing Cerra Street into the Comandante Cerra Street. Once out of this last street it crosses several portions of open country and also small settlements lying here and there, until it connects with the military road at its junction with the two roads leading to Camp Las Casas and the suburb known as Monte Flores. In accordance with the law, the location follows, as far as practicable, the streets already established, and the center line has been fixed, taking care to occupy the least possible area of private property.

The necessary field data has been obtained to prepare the right-of-way map of all land to be taken up by the road, and everything was being arranged to proceed with the construction.

As explained elsewhere in this report, however, the said appropriation of \$100,000 made by the legislature last year is not available, as this act and several others which were passed at the same session making appropriations were indefinitely held up. It is not therefore possible to start construction until the legislature finds a way to provide funds. To gain time and have everything in readiness to begin construction when the money becomes available, and also bearing in mind that the most expensive item in the cost of this road is the securing of the right of way, which daily increases in value, it has been decided to utilize the balance of the first appropriation of \$60,000 to rush the work of mapping and computing the surveys of the various parcels of land to be occupied by the road, and to expedite negotiations for acquiring them either by purchase or through condemnation proceedings. An active campaign has also been started to obtain gratis as much of the land as possible through donations of the owners, and a good part of it has already been secured in this way.

*Loss of personnel of the field and office force.*—As the survey work and location of the various sections of road were to be immediately constructed with the funds available were finished, the number of survey parties was gradually reduced, a good many of the personnel so employed having been transferred to the office, and others to work as inspectors on the construction, which was started during the year.

The men who were transferred to the office were to take the place of others who had left to enter the military service. The number of transitmen, levelmen, rodmen, and draftsmen who have left the department to join the Army has been so large that the number of field parties had to be necessarily reduced to such an extent as to leave, during the month of June, only three parties working, respectively, in the Lares-Adjuntas, Yauco-Lares, and Maricao-Indiera roads. A good many men of these three parties also left their work during July to enter the third officers' training camp, so that at the time of writing there is but one field party organized.

It will therefore be rather hard to get sufficient men to organize the field parties when surveying work is again resumed, as the supply of able men for this kind of work is rather limited at present. It is to be regretted, therefore, as far as that work is concerned, that the personnel already employed for some time and trained at the expense of the government should have left us, but their resolve is one worthy of praise, and it is with the greatest satisfaction that the department here records their departure to answer the call of duty.

The table entitled "Roads surveys, 1917-18," shown below, gives the total length of road surveyed and finally located on the various roads mentioned and gives the average cost per kilometer finally located, which amounts to \$443.88. This average cost is computed distributing the total cost to date for the two years 1916-1918 over the total length of kilometers surveyed and located in the field, as well as the office work in connection with plotting the work and preparing the projects for construction. It is for this reason that the cost per kilometer appears to be considerably higher than that reported last year, which amounted to \$365.07, as up to the time of last year's report only the field work had been done, and therefore no expenses in office work had yet been incurred.

*Road surveys, 1917-18.*

Road.	Preliminary survey, 1917-18.	Topography, M2, 1917-18.	Final location, kilometers, 1916-17.	Final location, kilometers, 1917-18.	Total amount expended, 1916-17.	Total amount expended, 1917-18.	Total amount expended, 1916-1918.	Cost per kilometer.
Lares-Adjuntas.....	23.1	112,000	10	<sup>1</sup> 14	\$6,647.87	\$12,296.10	\$18,943.97	\$789.33
Arecibo-Lares.....		6,000	22	<sup>2</sup> 1	6,516.86	1,314.20	7,831.06	340.48
Clares-Juana-Díaz.....	1.0	1,000	16	<sup>3</sup> 13	6,634.47	6,324.81	12,959.28	446.87
Corosál-Barros.....	33.3	10,000	16	<sup>4</sup> 17	11,384.71	6,965.29	18,350.00	556.06
Mayaguez-Maricao.....		2,000	6	<sup>5</sup> 3	2,167.53	3,813.09	5,979.62	664.40
Vieques.....			23	<sup>6</sup> 1	3,089.27	487.43	3,576.70	149.03
Corosál-Morovis.....		8,000	10	<sup>7</sup> 2	2,749.82	1,749.36	5,499.18	458.26
Yauco-Lares.....	33.8	13,000	6	<sup>8</sup> 11	1,212.74	4,392.33	5,605.07	329.71
Maricao-Indiera.....	25.1	52,000		<sup>9</sup> 5		2,402.57	2,402.57	480.51
San Ant.-Martín Peña.....	4.0	34,000		<sup>10</sup> 4		1,771.22	1,771.22	442.80
Comerio-Cidra.....			17		1,976.82		1,976.82	116.28
Utuado-Lares.....					2,827.63	9.60	2,837.23	
Comerio-Aguas Buenas.....			1		129.73		129.73	129.73
Bayamon-Toa Alta.....					26.50		26.50	
Total.....	120.3	238,000	127	71	43,363.95	41,525.00	87,888.95	

Average cost per kilometer finally located, \$443.88.

- <sup>1</sup> Relocation of 1 kilometer included.
- <sup>2</sup> Relocation of 1 kilometer near Lares.
- <sup>3</sup> Relocation of 6 kilometers included.
- <sup>4</sup> Relocation of 4 kilometers included.

- <sup>5</sup> Relocation on Maricao side included.
- <sup>6</sup> Relocation of 5½ kilometers included.
- <sup>7</sup> Relocation of 1 kilometer included.
- <sup>8</sup> Preliminary survey, 41 kilometers, in 1916-17.

## DIVISION OF PUBLIC BUILDINGS.

Created primarily to have charge of the design, construction, repair, and maintenance of public buildings belonging to the people of Porto Rico, the division of public buildings, in assisting the various municipalities and school boards in the design and construction of their respective buildings, has had its work augmented to such an extent that during the past year practically all municipal work of an architectural nature has been handled by this division.

Buildings for the municipalities and school boards are undertaken only at their request, and all expenses incurred in extending this service are reimbursed by the municipality or the school board for whom the work is performed. The funds for such work being obtained either by a loan from the insular government or from their current funds.

In addition to the repair and maintenance of old buildings, the attention of the division is taken up with the design of new work, varying from school buildings of various sizes and types, hospitals, asylums, jails, town halls, and public market places to meat shops, slaughterhouses, and municipal stables. In some instances where there is urgent need of the building and a failure to obtain satisfactory bids from public advertisement, the actual construction of these buildings is undertaken by this division.

During the past year the division has also been called upon to give expert advice and criticism in checking projects which have been prepared by private engineers and architects for the various municipalities.

Other divisions of the department, and also other departments of the government, have obtained assistance from the division in the design of uniforms, badges, revenue stamps, architectural treatment of bridges, and telegraph and telephone office furniture.

## PERSONNEL.

The force employed by the division varies with the amount of work at hand. Normally it comprises an architect, who is chief of the division, an assistant architect, a chief draftsman, a superintendent of public buildings, and a chief clerk.

The drafting force consists ordinarily of 10 draftsmen, working under the direction of the chief draftsman, while the superintendent of public buildings has the assistance of three inspectors, one for plumbing and electrical work and two for general inspection. The clerical force consists of two stenographers under the supervision of the chief clerk. The work under construction is inspected by a field force of from 15 to 30 men, who report directly to the architect.



## MATERIALS AND CONSTRUCTION.

The majority of buildings are constructed of reinforced concrete, with frame construction for floors and roofs. Brick construction has been used but in rare cases, and frame buildings are confined mostly to rural schools located in the mountainous districts.

The types of construction and the matter of finishing materials varies according to the location of the building, those in San Juan, Ponce, and the larger cities being of a more expensive character than in other localities. In all cases the new buildings are designed in keeping with their surroundings and a great amount of study is being made to improve the different localities by placing buildings of a simple but ornate character within their midst.

The choice of materials is limited to a large extent to the local market, and while in the larger buildings materials are brought directly from the States it is the policy to make use of the materials which are carried in stock in large quantities by the merchants of Porto Rico. For this reason reinforced concrete is the favorite material, as most of the ingredients are obtained from the natural resources of the island. All brick used is of native manufacture, and as this industry has not yet obtained an article of high perfection, it has until recently been necessary to plaster both surfaces, resulting in a more expensive building and with no advantage over the concrete. In the school building at stop 18, Santurce, an experiment was made leaving the bricks exposed on the exterior of the building. Owing to the pleasing bond used in the execution of the work the building presents an attractive appearance; but as it was completed during the fiscal year there has not been sufficient time to determine the wearing quality of the brick.

Where wood is used yellow pine is preferred, as it has proven to be more satisfactory and is the only wood brought to Porto Rico in large quantities. Cypress, however, is used in some cases, but owing to its cost is confined mostly to articles of furniture. As there is a dearth of native hardwood it is a negligible factor in the materials of construction. A few rural schools have been constructed of native woods, and judging from the enduring qualities which they have demonstrated it is to be regretted that more of this material can not be obtained.

For the roof covering several classes of materials have been used, with varying degrees of success. In the larger buildings of San Juan and Ponce slate and clay tile have been used to good advantage. The tile has proven to be an excellent roofing, both for appearance and service, but it is expensive and can only be used on buildings of more pretentious character. Slate has been used on some of the schools of San Juan during the past year and gives promise of proving a success. Although only a short time has elapsed since this material was used in Porto Rico there is no reason why it should not prove satisfactory, both esthetically, if the slates are of proper sizes, with proper distribution of the various colors, and structurally, if of sufficient thickness and well nailed.

Previous to three years ago a paper composition was used for all classes of roofs, but as it had proved unsatisfactory its use was generally discontinued, being employed at present only on buildings of a temporary nature or where the roof pitch is too small to allow the placing of corrugated iron. The latter-named material has proven a success and is used extensively on buildings of all kinds, a special point being made to secure galvanized iron and not galvanized steel, as the latter does not contain the rust-resisting qualities when placed in proximity to the sea. The old Spanish-constructed roofs of native hard-burned bricks, placed in layers separated by a mixture of clay, lime, and sand, have lasted in some cases for a period of 200 years, but it is difficult to-day to employ this method, owing to the scarcity of hardwood timbers and to the quality of bricks found in Porto Rico.

In San Juan the floors are constructed of concrete with a wood top finish in the classrooms and red quarry tiles on the porches, stairways, and corridors. A small white tile is used for the flooring in the toilet rooms. One of the most commonly used finishes for concrete floors is a top dressing of cement cut into squares of about 2 feet.

Elsewhere on the island floors are of frame construction and give good results when the unexposed construction is treated with carbolineum, which prevents dry-rot and also acts as a guard against small insects, such as the comejen and the polilla, boring through the wood and causing the structural member to fail. The ceilings, owing to the light construction, are of wood, keeping the item of upkeep down to the minimum.

In the treatment of the walls the reinforced-concrete buildings offer a wider field than any other class of structures, the exterior being treated in several ways, such as plaster, chipping with a hatchet, bush hammered, and a smooth finish, obtained by rubbing the rough concrete with carborundum and a rich cement mortar. The insertion of colored tile plaques also lends variety to the finished aspect. The interior

walls are plastered, except in the cases of cheaper structures, when they are rubbed smooth. Although a cement plaster is generally used, a hard gypsum plaster has been employed in cases where a more ornamental appearance was desired.

#### FACTORS TENDING TO RETARD CONSTRUCTION.

It may be well to remark of the difficulties experienced during the past fiscal year in obtaining building materials from the United States. This has been due mainly to the embargo on rail and steamer shipping and also to the fact that manufacturers have been devoting the majority of their time and materials to war work. As a consequence, considerable trouble was found in obtaining contracts for the various works, but the division was fortunate in securing contracts for the important buildings, and while the speed of construction has necessarily decreased, the buildings are either completed or are rapidly nearing completion. In this matter the work of the division compares favorably with most, and is more fortunate than many of the localities in the United States.

As a result of this difficulty, however, it is the intention during the next fiscal year to study closely the natural resources of the island in the hope of adjusting the construction, so as to utilize whenever possible materials which can be obtained in Porto Rico.

#### WORK BY ADMINISTRATION.

As the repair and maintenance of public buildings is the work of major importance of this division, attention should be called to the small amount of yearly appropriation for their upkeep. These buildings are from 60 to 300 years old, are an obsolete type of heavy masonry structures with a frame roof construction covered with bricks. Owing to their extreme age it is a difficult matter to keep these buildings in a first-class condition, as the roofs especially are deteriorating to a marked degree.

Together, these buildings have an approximate value of \$2,000,000 and until the fiscal year 1916-17, only \$15,000 to \$20,000 was appropriated each year for their upkeep, notwithstanding the fact that an intelligent estimate shows that from \$150,000 to \$200,000 is required each year to keep the buildings in a good condition. During the past two fiscal years a yearly appropriation of \$50,000 has been granted, and while much has been done with this money to alleviate conditions, it has been impossible to give the proper attention to the much-needed repairs to the roofs.

With the possible exceptions of an additional story to the building occupied by the executive secretary, providing quarters for the public service commission and alterations to the deputation building providing quarters for the department of labor and agriculture, no special work of note has been done in the maintenance and reconstruction of public buildings during the past fiscal year. Numerous minor repairs, such as painting, repairing floors, partitions, roofs, and small alterations, have exhausted the funds for this period.

The appropriation for the fiscal year 1917-18 amounted to \$50,000, to which was added a \$3,000 transfer from the governor's emergency fund and which was used in connection with the alterations to the deputation building, providing quarters for the department of labor and agriculture. There was also an appropriation of \$2,000 for light and \$1,000 for water for the public buildings. The amount appropriated for lighting was found too small and \$1,000 was transferred from the \$50,000 appropriated for maintenance to this appropriation.

The \$52,000 thus remaining available for the maintenance and repairs of public buildings has been disbursed to defray expenses for work of repair, maintenance, and enlargement done on more than 50 jobs, as follows:

#### San Juan:

Allen No. 1, executive secretary's office.....	\$4,384.00
Allen No. 2.....	1,365.00
Allen No. 3.....	1,419.00
Allen No. 5.....	1,410.83
Audiencia.....	118.26
Carnegie Library.....	198.00
Deputation.....	7,680.00
Girls' charity school.....	212.00
Insane asylum.....	588.00
Intendencia.....	2,297.20
Leger colony.....	761.01
Naval station buildings and grounds.....	6,793.30
Pabellon, San Juan.....	300.00
Penitentiary.....	2,318.16
Public works machine shop, Marina.....	79.14
Tuberculosis sanatorium, Santurce.....	282.20
Police headquarters, San Juan.....	2,440.00
Police barracks, Seboruco.....	2.64
Polvorin St. House, Sol. St. Ed. Dept.....	293.62
Quarantine hospital, Marina.....	1,234.00

<b>Ponce:</b>	
Blind asylum.....	\$2,076.00
Captain of the port building.....	116.62
District court and jail building.....	2,720.00
Public works storehouse.....	100.00
<b>Mayaguez:</b>	
Reform school.....	248.74
Captain of the port building.....	31.94
Infantry barracks.....	104.68
College of agriculture and mechanic arts buildings and grounds.....	2,710.00
<b>Rio Piedras:</b>	
Experimental station buildings.....	36.96
<b>Arecibo:</b>	
District court.....	586.00
District jail.....	665.00
Sanitation buildings.....	35.40
<b>Guayama:</b>	
District jail building.....	1,253.00
<b>Humacao:</b>	
District jail building.....	873.48
Government building.....	160.97
<b>Culebra:</b>	
Government building and public cistern.....	96.80
Miscellaneous, salaries, transportation, and small buildings.....	4,607.99
<b>Total.....</b>	<b>52,000.00</b>

The alterations and additions to the Guayanilla town hall were completed during the year. This work consisted of general repairs, demolishing the old second story and rebuilding a new one to meet the present needs of the municipality and altering the façade to the street.

The municipality of Peñuelas having been unable to obtain satisfactory proposals for the construction of a slaughterhouse, the work was undertaken and completed by the division, with a total cost of \$1,000.

Furniture, such as tables, chairs, bookcases, etc., has been constructed for various departments during the year at a cost of about \$1,000.

During the course of the year old telegraph and telephone stations have been altered, new ones opened, and furniture designed for their use.

#### WORK UNDER CONTRACT.

Chief among the duties of the division is the design and construction of new public buildings for which appropriations are made by the legislature. Two works of special note in this class are the additions and alterations to the reform school at Mayaguez, and additional dormitories for the boys' and girls' charity schools at San Juan.

The alterations and additions to the reform school are practically complete, being made with a view of enlarging the capacity of that institution to 200 inmates, and to modernize the buildings so that all the requirements of best practice in similar institutions could be filled. The new construction includes an honor cottage, superintendent's residence, and three smaller cottages for the guards and their families. The honor cottage contains 2 dormitories, with a total capacity of 20 inmates, a large dining and clubroom, with kitchens, bath, and toilet arrangements. The residence for the superintendent provides four bedrooms, living room, dining room, kitchen and bath, compactly arranged. Each of the guards' cottages has two bedrooms, a combination of living and dining room, and kitchen and bath. All new construction is of reinforced concrete with frame roof and floor construction, the roof being covered with corrugated galvanized iron. The main building is being altered on the first floor, to provide additional dormitory space, and the second floor is being transformed into a modern hospital which will contain two large wards, one for contagious diseases, the other for general sickness, an operating room and office for the doctor. All equipment will be modern and sanitary. When completed, this work will cost about \$30,000.

Twenty thousand dollars was appropriated by the legislature to provide additional dormitories for the girls' and boys' charity schools in San Juan. This work is now in course of construction, and at the girls school consists of adding a wing to the western part of the building. This addition, which is 50 by 26 feet, is 3 stories in height, and carries out the design of the present building. The first floor is devoted to a large modern laundry, while the second and third floors are to be used as sleeping quarters. The walls are constructed of reinforced concrete while the floors and roof are of frame construction.

The work at the boy's charity school is very similar to that of the girls', being an addition of a wing three stories in height and 60 by 24 feet. The constructional features of the two schools are identical. These additions will provide new quarters for a larger number of inmates and will also relieve the present crowded condition of the two institutions.

School buildings form in volume and total cost, a large percentage of the work of the division. They range from small rural schools costing approximately \$1,000 to large graded schools which cost about \$200,000. With the exception of San Juan, high schools for the most important towns have been constructed, and plans are in preparation for the San Juan High School, which when finally completed, will cost in the neighborhood of \$400,000.

Graded schools range in size from 2 to 18 rooms, and are usually of reinforced concrete construction. All classrooms are 24 by 30 feet according to a standard adopted by the commissioner of education, and are well ventilated and lighted. Ample corridors lead to all rooms and where the building is more than one story high, wide easy stairs are provided. In providing sanitary conveniences for the schools, the division is called upon to devise various methods of arranging the water supply and sewerage disposal, as few towns have both these facilities. In the majority of cases the sewerage is disposed of by means of septic and filtering tanks located to the rear of the building. Where no water supply is available, rain water storage tanks have been constructed to feed the system, but more often, in this case, latrines placed in the rear of the school lot supply the need.

There are several graded schools now nearing completion, the more important of which are as follows:

Two-classroom school at Barceloneta.

Four-classroom school at Central Aguirre, Salinas.

Eight-classroom school at Gurabo.

Twelve-classroom school at Cayey.

Ten-classroom school at stop 15, San Juan.

And a large grade and technical school building at San Francisco Plaza, San Juan.

During the past year, the 14-classroom school building at stop 18, was completed. This school which is named "Rafael Maria de Labra" is of brick construction in the colonial style of architecture and is in the form of the letter U with a gallery connecting the two wings, thus forming a pleasing patio. Four tall concrete columns grace each entrance, and the white trimming, both wood and concrete, contrast beautifully with the dark red of the brick walls, which are laid in the Flemish bond. The roof is of slate, of variegated colors ranging from deep purple to light green and thoroughly blends with the color scheme of the building. Owing to the slope of the lot the school is two stories in height at the front and three stories at the rear, and is set back from the carretera about 125 feet. The lot is inclosed across the front by a brick concrete and iron fence designed in the same style as the building.

The manual training room, night school, and general toilets are located in the basement, while the first floor is devoted to classrooms and sewing room, the second floor also having classrooms and a kitchen for domestic science. The total cost of this building amounts to about \$110,000.

The "Rafael Cordero" 10-classroom school, on Congress Street, stop 15, Santurce, is rapidly nearing completion. The building, while also designed in the colonial style, is considerably different from the stop 18 school.

The building has two wings, connected by the central portion which is fronted with corridors, on both floors. On the first floor corridor arches are the central feature, superimposed by small Doric columns and a concrete balustrade on the second story. The exterior of the building is hatched chipped presenting a rough graded appearance. Brick is used for trimming around the arches of the first story and the windows leading to the stair hall on the front and sides. The roof is of slate, having a wide range of colors, while the floors of the building are of reinforced concrete, with a wood top covering in classrooms, and red quarry tiles for corridors and stairways. This building will probably be ready to be occupied at the beginning of the school year and will cost approximately \$60,000.

On the site of the old Infantry Barracks, San Francisco Plaza, there is nearing completion a large graded and technical school, called "Roman Baldorioty de Castro Graded and Technical School."

This building is in the form of a letter "I" with entrance on both sides of the building, facing and about 40 feet back from the old plaza. The site for this building was such that great difficulties were encountered in designing a building that would fit the needs of the school, providing light and ventilation and at the same time presenting a pleasing appearance. It is believed that all this has been accomplished.

The building is designed in the Greek renaissance, the Doric order being used. The first or ground floor forms a base upon which rests the Doric order extending through two upper stories. The main corridors at the front in the two upper stories are entirely open to the elements but as the rain comes from the east, this arrangement will provide a maximum ventilation while not interfering with its use.

A corridor 12 feet wide extends through the building on all floors, with doors leading to all the various classrooms. The concrete on the exterior has a smooth finish

on the first story and a combination of smooth and shipped surface on the two upper floors, the general color of the building being a warm yellowish gray. The roof is of flat quarry tile, except on the deck, which is of tin. The woodwork is all painted a light sarge green. The classrooms have floors of reinforced concrete, with a top covering of wood, and the walls and ceilings are of cement finish, with a pleasing tone of light gray.

The first, or ground floor, is devoted to offices of the school board and the supervising principal, and about 9,000 square feet to manual training. The second floor has the office of the principal, library, 12 classrooms, and 2 toilets. The upper floor has 6 classrooms, 2 large rooms for domestic science, and a large auditorium capable of holding 620 people. It is not believed that this building will be ready for the opening of the school year, but will probably be completed within one month later. This building, exclusive of furniture, will cost about \$170,000.

The schools in Gurabo and Cayey, the former of 8 rooms and the latter of 12 rooms, are similar to each other in construction, but considerably different in design. Both schools have reinforced concrete walls and floors in galleries, corridors, toilet rooms, and stairways.

The floors and roofs are frame constructed, roof covering being of galvanized iron. The school of Gurabo has four rooms on the first floor and four on the second, with toilets for girls and boys on each floor. The galleries and stairways leading to the classrooms are in the rear of the building.

The school in Cayey has 6 classrooms on the first floor and 6 on the second floor, with an inclosed corridor extending through the front between the two wings, and on both sides to the rear, where are located the toilets and stairway. The second floor has an open gallery extending across the front between end wings partially covered with rubbed tile. The exterior surface of this building is a combination of chipped and smooth surface. The design of the building is of a modified Spanish renaissance.

The 4-classroom school building at Salinas, Central Aguirre, is a one-story structure in a modified style of the Spanish type. At each end of the building is a wing connected by a central part. An arcade extends across the front between the end wings and corridors lead to the rear on either side. The exterior finish of the building is rough plaster sand finish, and roofed with metal Spanish tile. The cost of this building will be about \$15,000.

Many rural schools have been constructed, both of frame and concrete. Both classes have wood floors and corrugated iron roofs, and present a very pleasing appearance. The frame schools cost ordinarily from \$1,000 to \$1,500, while concrete schools of one room cost about \$1,800 to \$2,000.

The municipal building construction during the year consists of hospitals, meat shops, slaughterhouses, jails, etc. These are generally small structures, and with a few exceptions, sufficient note is given in the list of work at the end of this report. The buildings are generally of reinforced concrete, with galvanized iron roofing, equipped with the various appliances to meet the need of each class of building.

It may be well to mention the hospital of Utuado, which is partially completed. This building is constructed of bricks secured by the municipality from old buildings that have been torn down. The building is placed in high ground adjacent to the urban zone, and in plan is the shape of a letter U, one story in height. There is a colonade across the front between the wings, which leads to the various wards, nurses' rooms, doctor's office, operating room, etc. The general wards for men and women are located at either end of the building, and have open pavilions at the front for open-air convalescence. Private wards are provided for eight women and equal number of men patients. The kitchen is located in a separate building at the rear. When completed, the entire building will cost about \$12,000.

#### WORK COMPLETED.

During the coming fiscal year, the construction of many buildings are contemplated. Most important in this group is the new high-school building for San Juan, as the high-school facilities of the principal city of the island have long been inadequate and the need to relieve this condition is very urgent. Tentative sketches have been prepared and during the last session of the legislature, \$300,000 was appropriated for the construction of such a building. Sufficient rooms will be provided to care for the needs of San Juan for the next 10 years and will include laboratories and special apparatus, as called for in the curriculum of a modern high school. A large auditorium, with a capacity for 1,200 people, a modern gymnasium, and an athletic field will be included in the project. When entirely completed the building will cost approximately \$400,000.

Another important work to be done during the coming year will be the completion of the Ponce High School, for which \$50,000 was appropriated during the past year.

The work will consist of completing the building, as called for in the original plans, and will provide a large auditorium, library, and offices for the principal and for the School Board of Ponce. When this work is completed, the building will compare favorably with many of the best high schools in the States.

Many schools are in preparation, and also numerous municipal buildings of various classes and types. At the last session of the legislature, numerous appropriations were made for buildings throughout the island, but owing to lack of funds these appropriations have not become available. These buildings are very necessary, and it is to be hoped that the revenues of the island will warrant appropriations being made for their construction at the next session of the legislature, which takes place during the coming year. The total amount of the various works in contemplation may be seen in the tables appended at the close of this report.

## RECOMMENDATIONS.

It is desired to recall attention to two recommendations made in the last previous report.

The first is in reference to the practice of the municipalities and school boards in securing a site and an appropriation for the building, and then requesting that the project for the building be prepared for the lot selected. This leads to many difficulties, both in planning and constructing the building. Sometimes the building can not be made to fit the site, and the municipalities either have to acquire new sites or omit some portions of the building. Again difficulties occur in constructing the building on account of unforeseen conditions of the subsoil; a case in mind is a school that was built in Ponce, where the contract was made and later several thousands dollars were spent in placing an additional foundation.

It is hereby recommended that, if possible, requests for schools or other buildings be made before securing sites, and after a tentative sketch of the requirements is made, the architect will then investigate the available parcels of land in order to determine which, if any, would be adaptable for the building.

It is also recommended that legislation be enacted providing funds for the reconstruction of the majority of the roofs on the old government buildings. Many of the roofs which were constructed decades ago are in such a bad condition to-day as to invite failure, and are a constant menace to life and property. These roofs, which are of the exposed-beam type, the ends being embedded in the walls, are being gradually eaten away by insects and are liable to fall. Whenever possible, the superintendent of public buildings or his assistants inspect these beams, and if they are found defective they are braced. It is not possible to continue bracing up these old beams nor is it possible always to locate those that are defective. It is thoroughly understood that the appropriation for maintenance and repair of these buildings is much larger during the past two fiscal years, but it is not enough to do this constructive work, and therefore the department of the interior can not be held responsible for any damage caused by the dropping of one of these roofs.

*Work done during the fiscal year 1917-18.*

	Funds.	Expended during the fiscal year.	Total expended to date.
<b>SCHOOL BUILDINGS.</b>			
Arecibo, consolidated 4-room rural school building at barrio "Santana".....	C	\$6,447.56	\$46,110.74
Aguada, repairs roof "N. G. Font" school.....	A	916.66	916.66
Barceloneta, 2-classroom concrete school building barrio "Florida Ahuera".....	B	1,175.85	1,175.85
Barceloneta, 2-classroom concrete school building, barrio "Palmas Altas".....	B	3,487.30	3,487.30
Camuy, sanitary installation, graded school.....	B	490.00	490.00
Cayey, reinforced-concrete 12-room graded school.....	BC	31,060.69	31,060.69
Guanica, 1-room frame rural school, barrio "Arenas".....	C	85.87	924.91
Guanica, 2-classroom reinforced concrete rural school building, barrio "Cano".....	C	3,893.24	3,893.24
Gurabo, 8-classroom graded school.....	B	10,058.99	10,058.99
Las Marias, 1-room frame rural school, barrio "Alto Sano".....	C	970.98	1,292.01
Loiza, painting a portion of a 6-room school building.....	C	172.96	172.96
Mayaguez, electric installation high school.....	A	775.00	775.00
Mayaguez, reinforced-concrete high school.....	ABC	2,434.22	51,276.58
Mayaguez, toilet, building College of Agriculture and Mechanic Arts.....	A	493.66	493.66
Mayaguez, reinforced-concrete, science building, College of Agriculture..	A	1,253.92	11,869.23

*Work done during the fiscal year 1917-18—Continued.*

	Funds.	Expended during the fiscal year.	Total expended to date.
<b>SCHOOL BUILDINGS—continued.</b>			
Maricao, 1-room frame rural school, barrio "Indiera Alta".....	C	\$1,128.84	\$1,128.84
Maricao, 1-room frame rural school, barrio "Indiera Fria".....	C	1,105.49	1,105.49
Naranjito, repairs to Munoz Rivera graded school.....	A	584.63	584.08
Rio Piedras, 2-room reinforced-concrete addition to "Ramon Vila Mayo" school.....	C	4,921.84	5,987.26
Santa Isabel, water-supply installation "Braumbaugh" graded school.....	C	3,610.63	3,610.63
Salinas, reinforced-concrete 4-classroom school building, Central Aguirre.....	C	9,636.73	9,636.73
San Juan, 18-classroom reinforced-concrete school building, San Francisco Plaza.....	BC	118,350.86	118,350.86
Santa Isabel, 2-classroom concrete rural school, barrio "Descalabrado".....	B	3,398.36	3,398.36
San Juan, 14-classroom brick school building, stop 18, Santurce.....	BC	34,528.96	34,528.96
San German, 1-room frame rural school, barrio "Maresus".....	C	822.33	940.59
San Juan, 10-classroom reinforced-concrete school building, stop 15, Santurce.....	B	42,241.57	45,410.82
San Sebastian, 2-room frame school, barrio "Piedras Blancas".....	C	2,534.35	2,534.35
Toa Baja, 1-classroom, addition to "Miguel Rosich" rural school.....	C	1,448.78	1,448.78
Vieques, reinforced-concrete 2-room school, Puerto Real.....	C	5,753.07	5,753.07
Toa Baja, 1-room addition to "Enrique Huyke" school.....	C	1,394.60	1,394.60
Mayaguez, 12-room reinforced-concrete school.....	C	4,085.35	4,085.35
Mayaguez, alterations and additions to Reform School.....	A	21,983.47	21,983.47
Mayaguez, water supply to College of Agriculture and Mechanic Arts.....	A	556.82	556.82
<b>MUNICIPAL BUILDINGS.</b>			
Afonito, municipal hospital.....	B	1,649.95	8,099.00
Aguadilla, sanitary installation in city hall and jail buildings.....	B	2,197.87	2,197.87
Caguas, sanitary installation to city hall and meat shop.....	B	743.97	743.97
Caguas, sanitary installation to municipal hospital.....	C	702.14	702.14
Patillas, reinforced-concrete meat shop.....	B	1,130.70	1,130.70
Penuelas, slaughterhouse.....	B	1,137.71	1,137.71
Toa Alta, reinforced-concrete slaughterhouse.....	B	1,426.96	1,426.96
Utua, municipal hospital.....	C	5,136.88	5,136.88
Utua, municipal jail.....	C	2,131.06	2,131.06
Toa Alta, meat shop.....	C	1,083.31	1,083.31
<b>MISCELLANEOUS WORK.</b>			
Ponce, repairs to district court and jail building.....	A	2,499.44	2,499.44
Ponce, blind asylum and captain of the port building.....	A	2,382.00	2,382.00
San Juan, market for food commission at Punta de Tierra.....	A	2,412.15	2,412.15
San Juan, additions and alterations to secretary's office.....	A	10,300.00	10,300.00
San Juan, construction of furniture for various telephone and telegraph offices.....	A	1,011.16	1,011.16
San Juan, construction of a garage for the insular police, navy yard.....	A	1,848.15	1,848.15
San Juan, repairing roof, skylights, and painting, bureau supplies, printing, and transportation.....	A	1,093.46	1,093.46
San Juan, alterations to Dtputacion Building.....	A	5,000.00	5,000.00
San Juan, traveling bookcases for Carnegie Library.....	A	300.00	300.00
		365,988.69	544,102.24

*Work contracted, but no payment made up to June 30, 1918.*

	Fund.	Contract price.
<b>SCHOOL BUILDINGS.</b>		
Camuy, 2-classroom school, barrio Zanja.....	C	\$2,484.00
Celba, 1-room frame school building.....	C	1,074.36
Guanica, 1-room school building, barrio Arenas.....	C	1,325.00
San Juan, dormitories to boys' and girls' charity schools.....	A	19,754.88
<b>MISCELLANEOUS WORKS.</b>		
San Juan, construction of furniture for various insular telegraph and telephone offices.....	A	229.09
Total.....		24,867.33

*List of buildings completed since July 1, 1916, and prior to July 1, 1917.*

	Total cost.
<b>SCHOOL BUILDINGS.</b>	
Salinas, 1-room concrete school, barrio Playa.....	\$1,508.09
Salinas, 1-room concrete school, barrio Poleos.....	1,492.00
San German, 2-room concrete school building, barrio Minillas.....	2,748.04
Naguado, 10-room graded school.....	19,248.94
Mayaguez, high-school building.....	51,275.58
Vega Baja, 1-room frame school, barrio Almirante Central.....	820.00
Camuy, 6-room graded school.....	10,758.00
Vega Baja, 2-room frame school, barrio Algarrobo.....	1,619.00
Guanica, 1-room frame school, barrio Arenas.....	755.69
Salinas, 2-room school, barrio Lopez.....	3,500.00
Hatillo, 2-room frame rural school, barrio Capaes.....	1,732.77
Vega Baja, 1-room frame rural school, barrio Almirante Norte.....	821.50
Loiza, 2-classroom concrete school building.....	3,895.78
Cayey, 1-classroom frame rural school, Jajome Bajo.....	997.40
Mayaguez, 12-room concrete school building.....	34,464.35
Mayaguez, completion of science building, college of agriculture.....	11,869.23
Cayey, 1-classroom frame school, barrio Maton.....	987.90
<b>MUNICIPAL BUILDING.</b>	
Utuaedo, municipal jail.....	1,795.54
Bayamon, public market.....	4,736.00
<b>Total.....</b>	<b>155,023.81</b>

**COMPLETED PROJECTS OF WORK TO BE UNDERTAKEN.**

NOTE.—By "project" is meant the complete working drawings and specifications, including memoir, general and special conditions, estimate, and proposal.

	Estimated cost.
<b>SCHOOLS.</b>	
Repairs to practice school, Rio Piedras.....	\$3,547.49
Two-room concrete rural school, Luquillo.....	8,100.20
Four-room concrete graded school, Luquillo.....	10,000.00
Two-room concrete school, Sardinera, Fajardo.....	5,061.37
Two-room concrete school, Ceiba.....	7,296.98
One-room frame rural school, Aguada.....	1,315.93
One-room frame rural school, Las Piedras.....	750.82
One-room frame rural school, Espinosa, Vega Alta.....	919.83
One-room frame rural school, Tallaboa, Alta, Penueles.....	896.55
One-room frame rural school, Candelaria, Toa Baja.....	1,315.32
One-room frame rural school, Dagua, Naguabo.....	948.24
Alterations to experimental station, Rio Piedras.....	14,000.00
Alterations to 12-room school, Mayaguez.....	212.30
Library and office building, Mayaguez.....	10,500.00
Eight-room school at stop 25, San Juan.....	65,000.00
Guanica, 6-room school.....	30,000.00
Four-room school, Mediania Alta, Loiza.....	6,200.00
Two-room addition to Playa School, Mayaguez.....	3,700.00
Repairs to various schools at Vieques.....	7,644.09
Repairs to dean's house, college of agriculture, Mayaguez.....	488.86
<b>MUNICIPAL BUILDINGS.</b>	
Repairs to Alcaldia, Ciales.....	1,805.78
Municipal jail, Maunabo.....	2,300.00
Fajardo customhouse, Playa.....	14,000.00
Stables, walks, and roads, Salinas city hall.....	3,500.00
Municipal jail, Aguas Buenas.....	1,400.00
Municipal meat shop, Fajardo.....	1,000.00
Municipal hospital, Fajardo.....	15,000.00
Repairs to municipal hospital, Bayamon.....	1,668.82
<b>Total.....</b>	<b>218,571.78</b>



*Projects in course of preparation.*

	Estimated cost.
<b>SCHOOLS.</b>	
High school, San Juan.....	\$340,000.00
Eight-room graded school, San Sebastian.....	20,000.00
Completion of Ponce high school.....	50,000.00
Two-room addition Clay School, Lares.....	8,000.00
Six-room school, Lares.....	14,500.00
Athletic field, stop 16, Santurce.....	15,000.00
Four-room graded school, Seboruco, San Juan.....	10,000.00
Four-room graded school, Machuchal, San Juan.....	10,000.00
Four-room addition Farragut School, Mayaguez.....	16,000.00
Four-room frame school annex Ponce de Leon School, Humacao.....	3,000.00
Thirteen-classroom school, San German.....	13,000.00
Four-room graded school, Guaynabo.....	25,000.00
Graded school building, Morovis.....	20,000.00
Seven-room school building at Marina, San Juan.....	35,000.00
New fence around school at Patillas.....	1,000.00
Dormitories in boys' and girls' charity schools.....	30,000.00
Four-classroom school building at Río Piedras.....	18,000.00
Law and pharmacy building, University of Porto Rico.....	40,000.00
<b>MUNICIPAL BUILDINGS.</b>	
Municipal hospital, Adjuntas.....	2,000.00
City hall additions, Adjuntas.....	2,000.00
City hall, Comerio.....	8,000.00
Municipal hospital, Comerio.....	5,500.00
Slaughterhouse, Maunabo.....	1,000.00
City hall, Cidra.....	8,500.00
Market, Manati.....	20,000.00
Morgue, Morovis.....	1,000.00
Slaughterhouse, Morovis.....	1,000.00
Fire station and public library, Yabucoa.....	3,000.00
<b>MISCELLANEOUS BUILDINGS.</b>	
Insane asylum, Río Piedras.....	300,000.00
Customhouse, San Juan.....	100,000.00
Tenement house, Puerta de Tierra.....	650,000.00
Altering house at experiment station, Río Piedras.....	1,800.00
<b>Total.....</b>	<b>1,589,300.00</b>

**MUNICIPAL WORKS AND IMPROVEMENTS.**

The construction work done by the various municipalities is usually paid from loans made through the insular government under the condition that the work should be supervised, inspected, and approved by the commissioner of the interior, who must also approve the plans, specifications, and contracts for the same.

The municipalities as a rule, have no engineering force to do the work, and the division of municipal engineering, at their request, prepares the plans and specifications, and inspects all work on street pavements, electric plants, sewer systems, waterworks, and other municipal improvements, except on municipal buildings and roads which are handled by other divisions of this department.

This division has made also many reports on franchises granted by the executive council and public-service commission to public-service corporations, passed on plans and specifications submitted for the approval of the commissioner, and has acted as consulting engineering office for all the municipalities of the island, especially for those lacking an adequate technical force.

**PERSONNEL.**

The salary of the engineer in charge of municipal works, who is the chief of this division, and of the assistant engineer and stenographer are paid from the insular budget. Additional personnel, which varies with the amount of work on hand, is employed when needed, and their salaries as well as all other expenses incurred in the preparation of projects or execution of work are repaid by the municipalities for work undertaken at their request.

**FACTORS TENDING TO RETARD CONSTRUCTION.**

The amount of work coming to this division has been falling off because, on account of the high cost of material and labor brought about by war conditions, all construction of no immediate need has been postponed until we return to normal conditions. At

present all loans made to the municipalities through the insular government have been suspended at the request of the auditor, who holds that the available surplus in the treasury after the ordinary expenses of the government are met will be less than the combined amount of several no fiscal year appropriations authorized by the legislature during the last few years. Many of these no fiscal year appropriations provide for work which has not been started because the amounts appropriated are insufficient to cover the cost of even a small part of the work as originally contemplated, but until they are canceled by legislative action they will stand on the auditor's books as liabilities against the treasury and will prevent the use of the surplus money for other purposes. As the municipalities, especially the small ones, can not obtain from other sources money on terms as favorable as those provided for in the loans made through the insular government, very little construction work will be started in the future unless the situation regarding the available surplus in the insular treasury is cleared up.

#### WORK DONE DURING THE FISCAL YEAR.

The following work started during the previous fiscal year was finished during the year 1917-18:

Waterworks extension at Aibonito.

Paving of Progreso Street, Aguadilla.

Construction of electric light plant for Salinas.

This year work was started and completed on the watchman's house of the sewerage disposal plant and paving of several streets at Caguas, and improvements at the Plaza at Toa Baja. Work is now in progress on the construction of a sewer system at Yauco, which will be paid from a loan of \$40,000, granted in May, 1917, by the insular government. The plans provide for sewerage of all streets which are now built up and additional piping can be added as found necessary, the main sewer being of ample capacity. This sewer will be connected to a septic tank of reinforced concrete, the effluent to discharge into the Yauco River.

Projects have been prepared during the year for improvements in the waterworks of Comerio, revision of plans for waterworks at Juana Diaz, Naguabo, San Lorenzo, and Santa Isabel, revision of sewer plans at Yauco, Naguabo, Comerio, and Rio Piedras, plans for electric plants at Arroyo and Patillas and project for street paving at Gurabo.

#### WATERWORKS.

The work on the improvement and extension of the waterworks of Aibonito was started during the year 1916-17 and completed last year at a total cost of \$8,481.98. This work was performed by administration, as described in last year's report, because the bids received were too high.

An electric motor was installed in the pumping plant at Salinas to substitute the old gasoline engine. This work was performed by contract at a total cost of \$905.50.

An investigation was made during the year of the conditions of the waterworks at Caguas, and a plan to increase the water supply was recommended.

The following statement gives an idea regarding the situation as to water supply in the island, showing that 36 towns are provided with more or less efficient system of water supply:

Arecibo, fair pumping system, water power used.

Aguadilla, has a modern gravity supply system.

Aibonito, gravity system, improvement completed.

Barranquitas, modern gravity system.

Caguas, gravity system, pipe line inadequate.

Cayey, gravity system.

Ciales, excellent gravity system.

Coamo, good gravity system.

Comerio, modern gravity system.

Corozal, modern gravity system.

Fajardo, excellent gravity system.

Guayama, excellent gravity system.

Guayanilla, good pumping system.

Guanica, good pumping system.

Gurabo, excellent gravity system.

Humacao, excellent gravity system.

Hayuya, good gravity system.

Juana Diaz, poor and inadequate system.

Juncos, good gravity system.

Lares, modern gravity system.

Maricao, excellent gravity system.

Maunabo, excellent gravity system.

Mayaguez, very poor gravity system.  
 Naguabo, small gravity system.  
 Naranjito, good gravity system.  
 Patillas, inadequate gravity system.  
 Peneulas, excellent gravity system.  
 Ponce, inadequate gravity system.  
 Quebradillas, small pumping plant.  
 Rio Piedras, included in San Juan system.  
 Salinas, good pumping system.  
 San Juan, fair system, electric pumping plant with rapid filters.  
 Utuado, excellent gravity system.  
 Vieques, small pumping plant.  
 Yabucoa, good gravity system.  
 Yauco, excellent gravity system.

## SEWERS.

Sewer systems are found in the seven following towns only: Aguadilla, Arecibo, Caguas, Cayey, Fajardo, Lares, and San Juan, but many towns are anxious to install a sewer system, and much work on this line will be done as soon as the present high cost comes down to normal conditions.

A contract for the construction of a sewerage system for the town of Yauco has been let for the sum of \$34,473.20, and the work has been started.

A loan of \$52,000 has been granted to the municipality of Rio Piedras for the construction of a sewer system. On account of the topography, the original project divided the town in three districts, two for the town of Rio Piedras and a third for the less populated section of Hato Rey. In the revised project only the first two districts have been included in order to keep within the amount of money available. The sewerage of district No. 1 will be discharged into the Piedras River; the other district will be connected to an Imhoff tank discharging into the same river.

## PAVEMENTS.

The paving of Progreso Street in Aguadilla with macadam, which was started during the year 1917-18, was completed last year with a total expenditure of \$5 910.45.

The streets of Caguas along the route traveled by the automobiles going on the military road were in very bad condition and were paved with macadam by administration under the supervision of this department during the last fiscal year at a cost of \$2,517.97.

## ELECTRIC-LIGHT SYSTEM.

The construction of an electric-light system for Salinas, with current supplied by the Carite power plant, was finished during the year at a cost of \$8,081.28, including inspection expenses.

## EXPENDITURES.

The expenses of the division charged out to municipalities during last fiscal year were as follows:

Salaries (engineering and inspection).....	\$544.73
Traveling and per diem expenses.....	160.44
Stationary, telegrams, etc.....	127.61

Total..... 832.77

The following is the total cost of the various projects begun prior to June 30, 1917:

Alfonito waterworks improvements.....	\$8,481.98
Aguadilla, Progreso Street paving.....	5,910.45
Salinas electric-light system.....	8,081.28

Total..... 22,473.71

The amount of work done during the year on the preceding projects is as follows:

Alfonito waterworks improvement.....	\$5,664.93
Aguadilla, Progreso Street paving.....	4,429.59
Salinas, electric-light system.....	8,081.28

Total..... 18,155.80

Work done on projects begun and finished this year:

Salinas, electrification of waterworks.....	\$905.50
Caguas, street paving.....	2,517.97
Caguas, house for keeper of purification plant (sewer system).....	177.71

Total..... 22,056.98

Total of work done this year,..... 40,013.78

The following projects were prepared during the fiscal year 1917-18:

Comerio, improvements to waterworks.....	\$600.00
Comerio, sewer system.....	15,000.00
Salinas, sidewalks and driveway at city hall.....	1,066.00
Arroyo, electric-light system.....	7,800.00
Patillas, electric-light system.....	5,500.00
Naguabo, revision of plans and estimate for waterworks.....	52,800.00
Naguabo, revision of plans and estimate for sewers.....	17,450.00
Salinas, electrification of waterworks.....	905.50
Yauco, revision of project for sewer system.....	38,000.00
Rio Piedras, revision of project for sewer system.....	62,000.00
Gurabo, repair of streets.....	2,200.00
Total.....	203,320.50

It has been shown that the division of municipal works does practically all work of construction of waterworks and sewers, and has been of great help to the municipalities most of which would not have to-day many improvements if they had not received the valuable service rendered by this division.

#### PUBLIC LANDS.

The division of public lands and archives has charge of the survey, care, and leasing of the lands belonging to the people of Porto Rico, part of which originally belonged to the Crown of Spain, and was ceded by the Government of the United States to the insular government to be administered for the benefit of the people of Porto Rico, and part bought at tax sales. It has charge also of the old Spanish archives relating to lands, waters, forests, mines, harbors, concessions, and public works and improvements.

Recently it has been engaged in surveying lands belonging to the municipalities and school boards used as sites for municipal and school buildings, but in such cases the expenses incurred, while paid by the insular government, are later reimbursed to the insular treasury by the respective municipality or school board.

#### PERSONNEL.

The appropriation for the support of this division during the fiscal year 1917-18 was as follows:

Chief of division.....	\$2,300	Assistant archivist.....	\$ 600
Surveyor.....	1,500	Stenographer.....	840
Clerk and surveyor.....	1,300		
Surveyor.....	1,200	Total.....	11,240
Surveyor and computer.....	1,200	Contingent expenses.....	4,000
Draftsman and computer.....	1,000		
Archivist and librarian.....	1,200	Total.....	15,240

#### EXPENDITURES.

The expenses incurred for traveling, purchase and repair of instruments, laborers' wages, and other necessary field expenses in connection with the new surveys and paid out of the fund for contingent expenses during the fiscal year amounted to.....	\$1,966.36
Amount transferred from this appropriation to cover deficiencies in the appropriation for incidental expenses in the office of the commissioner of the Interior on warrant of the auditor approved by the governor.....	2,000.00
Unexpended balance.....	33.64

Total amount appropriated for contingent expenses..... 4,000.00

In addition to the foregoing the division also incurred other expenses, as follows:

For surveying and plans for laying out of street and plots on ground belonging to the people of Porto Rico at Puerta de Tierra and Marina, San Juan, and advertisements for sale, in pursuance of an act at the legislative assembly of Porto Rico, entitled "An act to provide for the survey and sale at public auction of certain lands belonging to the people of Porto Rico, to construct the Capitol, and for other purposes," approved Apr. 13, 1916.....	\$258.08
For work done in making deeds transferring to private parties certain lots of the people of Porto Rico, situated in the barrio Boqueron, municipality of Cabo Rojo in pursuance of an act of the legislative assembly entitled "An act to authorize the sale or lease of certain lands of the people of Porto Rico situated on the barrio of Boqueron, Cabo Rojo, and for other purposes," approved Apr. 13, 1916.....	17.44

The total expenditure for the division of public lands and archives during the fiscal year has been:

For budgetary personnel.....	\$11,240.00
For field force and incidental expenses.....	1,966.36
Total.....	13,206.36

This total figure does not include the expenditure for the account of the municipalities and school boards, which, during the fiscal year, amounted to \$134.25, as in both cases, as already stated, the funds disbursed are reimbursed to the insular government by said municipalities and school boards.

## SURVEYS OF LAND.

The following table contains a statement of the land surveyed during the fiscal year 1917-18:

## LAND SURVEYED FOR THE INSULAR GOVERNMENT.

Municipality.	Ward.	Government property.		Private property.	
		Square meters.	Cuerdas.	Square meters.	Cuerdas.
Yauco and Guanica	Barina and Maniel		1,149.60		
Guayama	Jobos		22.03		
Cayey	Farallon		50.00		
Carolina	Sabana Abajo		684.07		146.00
Rio Piedras	Sabana Llana		164.99		27.00
San Juan	Santurce		111.97		
Rio Piedras	Sabana Llana		2.00		
San Juan	Pta. de Tierra	8,507.00			
Salinas	Palmas		17.78		
Do.	do.		8.91		
Do.	do.		6.27		
San Juan	Pta. de Tierra	131.13			
Arecibo	San Felipe		1.53		
Guayanilla			560.96		
Alfonito	Cacnillas		273.26		
Luquillo	Sierra		640.00		707.00
Mayaguez	Guanaibito	69,568.00			20.49
Maricao	Indiera and Maricao Afuera		2,500.00		2,300.00
Rio Piedras	Monacillo		187.10		
Total		78,206.13	6,380.47		3,200.49

Total area of land surveyed for the insular government:

Public land	cuerdas	6,400.37
Private land	do.	3,200.49
Total	do.	9,600.86

The cost per acre of surveying the lands of the insular government is \$1.10, which cost has been reached by dividing the expense of surveying both private and government land, \$7,066, by the actual area of government land, 6,400.37 cuerdas.

## LAND SURVEYED FOR THE SCHOOL BOARDS.

Municipality.	Ward.	School board property.
		Square meters.
Barceloneta	Florida Afuera	3,591.00
Do.	Palmas Altas	7,861.00
Do.	Pueblo	3,552.00
Agua Buenass	Mulas	11,791.00
Celba	Chupa Callos	3,930.00
Loiza	Mediana Alta	5,284.00
Sabana Grande	Rayo	3,930.00
Isabela	Arenales Altos	3,930.00
Corozal	Palos Blancos	3,930.00
Rio Piedra	Pueblo	7,728.00
Morovia	do.	1,785.00
Guanica	Arenas	3,930.00
Isabela	Coto	3,930.00
Luquillo	Juan Martin	3,930.00
Total		69,652.00

## LAND SURVEYED FOR THE MUNICIPALITIES.

Municipality.	Ward.	Municipal property.
		<i>Square meters.</i>
Fajardo.....	Pueblo.....	690.08
Patillas.....	do.....	3,927.09
Do.....	do.....	395.40
Do.....	do.....	8,214.53
Luquillo.....	do.....	1,525.00
Mainabo.....	do.....	1,902.00
Total.....	.....	16,554.06

## MISCELLANEOUS WORK.

The following work was also carried out during the fiscal year:

Investigation of certain public lands in Santa Isabel and others in Ceiba.

In compliance with the provisions of the law of the legislative assembly entitled "An act to provide for the settlement of land claims in the barrio of Catano, municipality of Bayamon," approved March 10, 1910, and in accordance with the recommendation made by the commission therein created to the effect that the dominion and title to 27 lots situated in Catano be transferred by the government to the people who had possession of them, the commissioner of the interior has continued this work of transfer of title, 18 deeds of transfer having been made during the year in favor of the respective occupants of the land.

In compliance with legislation approved April 13, 1916, to authorize the sale or lease of certain lands of the people of Porto Rico situated in the barrio of Boqueron, Cabo Rojo, five deeds were executed selling five plots to Benigno Cruz Toro, Juana Rivera, Simon Sarria Carlo, Ricardo Carlo, and Manuel Acosta.

Carrying out the provisions of the law of the legislative assembly entitled "An act to provide for the survey and sale at public auction of certain lands belonging to the people of Porto Rico, to construct the capitol, and for other purposes," approved April 13, 1916, a plot has been sold to Mrs. Catalina Coll de Méndez, but the deed has not yet been executed.

In accordance with joint resolution approved April 13, 1916, authorizing the commissioner of the interior and the attorney general in the name of the people of Porto Rico to make a settlement with Aniceto Miranda the litigation pending in the district court of San Juan, section 1, between the people of Porto Rico and Aniceto Miranda was settled in consideration of the amount of \$4,253.50 that Miranda must pay the people of Porto Rico, and a deed was executed between the aforesaid parties to that effect.

In compliance with the provisions of a joint resolution approved November 9, 1917, authorizing the commissioner of the interior and the attorney general to make a settlement in the name of the people of Porto Rico with Juan Fernández Gómez and Cristobal Fernández Díaz, the litigation pending in the district court of San Juan, section 1, between the people of Porto Rico and said Juan Fernández Gómez and Cristobal Fernández Díaz was settled in consideration of the amount of \$785.13 paid by them to the people of Porto Rico.

Carrying out the purposes of a law approved November 30, 1917, entitled "An act to establish, develop, and maintain a public park in the municipality of San Juan to be known as Muñoz Rivera Park, a deed was made by the commissioner of the interior transferring to the municipality of San Juan title to a certain parcel of land for the construction of said park.

Carrying out the provisions of the law of the legislative assembly entitled "An act to provide for the survey and sale at public auction of certain lands belonging to the people of Porto Rico, to construct the capitol, and for other purposes," plans have been prepared in the division of public lands for the laying out of a street and 35 plots with an area of 22,246.72 square meters on grounds located in the barrio of Marina, municipality of San Juan. Many of these plots are now advertised for sale.

There have been recorded in the registry of property of San Juan 23 farms belonging to the people of Porto Rico, 2 in the registry of Ponce, and 1 in Guayama.

Report has been rendered to the district court of Guayama in connection with the civil case of the people of Porto Rico v. Ramón Morales Rodríguez, also to the district court of San Juan, section 1, in the case of the people of Porto Rico v. Sucesión de R.

Valdés, and another case in the same court against Pedro R. Zamorano. These suits are for recovery of possession of certain lands belonging to the insular government in Cayey, Bayamon, and San Juan, respectively. The first and last cases have been decided in favor of the insular government and are now before the supreme court in appeal.

Seventy-four copies of public documents in the archives of the department have been issued by this division to private parties on which fees amounting to \$171.88 have been collected. The classification and inventory of the documents of the old Spanish archives has continued during the year, there being up to the present time 12,323 expedientes properly classified and inventoried and 2,051 expedientes only classified.

This division has leased during the fiscal year 54 separate parcels of government land to private individuals at an annual rental of \$948.57, making a total rental of \$16,897.48 for all lands leased up to and including June 30, 1918, or an increase of \$888.27 over the previous year. Three parcels of government lands, which are acquired by the government for delinquent taxes, were redeemed by their previous owners or interested parties in accordance with a law approved on December 3, 1917.

Attached herewith is a statement showing all the lands leased during this year, some of which were previously leased, but as their leases expired they have been leased again.

#### RECOMMENDATIONS.

The division of public lands and archives is self-supporting, as will be seen by comparing the annual income to the government derived from its activities with the annual expenditures which its maintenance requires.

The principal source of income is from the rental of public lands, and there has been no difficulty in leasing these lands as fast as they can be surveyed and titles perfected and recorded. It is estimated that there are still approximately 100,000 acres of unsurveyed public lands, a large portion of which are being exploited by squatters, who in many cases are despoiling the land and depreciating its value.

The cost of surveying these lands will depend largely upon the amount made available for the purpose each year. The overhead charges are practically constant, so that the greater the yearly appropriation the greater will be the field force employed and the less the cost per acre. Allowing a period of five years for the work, it is estimated that the surveys can be completed for \$90,000, and there is no doubt that the yearly rentals would furnish a handsome return upon this investment. It is therefore hereby recommended that a continuous appropriation of \$18,000 per year be made by the legislature for this purpose.

It is also recommended that the legislature carefully revise all laws relating to the leasing, utilization, and sale of public lands, harmonizing them by eliminating conflicting, obsolete, and unnecessary provisions.

There are a number of lots lying along the water front in San Juan, situated between the sea wall and the lands occupied by the American railroad station, which were advertised for sale by the commissioner of the interior, as provided by act No. 37, approved in April, 1916. Owing to the great value of these lots, it appears improbable that any offers will be made for their purchase at anything like their actual or assessed value, and as it is believed that the insular government would derive greater benefits from the lease, rather than the sale, of these lots, and, furthermore, since the term of years for which the commissioner of the interior is authorized by law to lease public lands, viz, 15 years, is too short a period to induce lessees to make permanent improvements on leased lands, the leases for these lots should be for a longer term of years.

It is therefore respectfully recommended that these facts be presented to the legislature with the recommendation that these lots be excluded from the sales of lands authorized by act No. 37, of April, 1916, and that they be leased for a long term of years.

*Statement showing land belonging to The People of Porto Rico leased by the commissioner of the interior with the approval of the Executive Council, during the fiscal year 1917-18.*

Date.	Name of lessee.	Area.	Municipality.	Annual rent.	Per-cent- age.
1917.					
July 3	Clemente Martínez.....	35.75 cuerdas.....	Vega Baja.....	\$100.00	25.00
Aug. 10	Dolores Cuevas.....	37.93 cuerdas.....	Utuaño.....	15.80	6.00
June 26	Fco. Díaz García.....	14 cuerdas.....	San Sebastián.....	10.00	8.00
July 24	Francisco Vélez.....	200 square meters.....	Ponce.....	8.00	8.00
Sept. 16	Fco. Santiago.....	24.41 cuerdas.....	Utuaño.....	16.54	6.40
1918.					
Jan. 2	Domingo González.....	20 cuerdas.....	do.....	24.00	8.00
2	José Martínez.....	31.36 cuerdas.....	do.....	13.80	6.00
2	José Rodríguez.....	63 square meters.....	Mayaguez.....	2.64	8.00
2	Máximo Pérez.....	62.02 square meters.....	Utuaño.....	24.00	6.00
2	Antonio Serrano.....	0.50 cuerda.....	Arecibo.....	4.00	8.00
2	Antonio Santiago.....	1 house.....	Sabana Gde.....	3.50	8.57
2	R. Vargas Jiménez.....	16 cuerdas.....	Las Marías.....	40.00	12.50
2	Bernardino Rodríguez.....	6 cuerdas.....	Naranjito.....	2.40	8.00
2	Isaac Ortiz.....	10 cuerdas.....	do.....	4.00	8.00
2	Juan Díaz Robledo.....	50 cuerdas.....	Santa Isabel.....	50.00	10.00
2	Saturnino Rosado.....	25 cuerdas.....	do.....	25.00	10.00
2	Juan Díaz Robledo.....	80 cuerdas.....	do.....	80.00	10.00
Feb. 24	Dolores López.....	60 square meters.....	Aguadilla.....	3.00	10.00
5	Pedro Rosario.....	10 cuerdas.....	Naranjito.....	4.00	8.00
5	Juan José Rosado.....	42.55 cuerdas.....	Utuaño.....	18.06	6.00
5	Secundino Guzmán.....	77.89 square meters.....	Bayamón.....	5.07	13.00
5	Conrado Ríos.....	10 cuerdas.....	Naranjito.....	4.00	8.00
5	Victor Cabrera.....	5 cuerdas.....	do.....	2.40	8.00
5	Juan José Rosado.....	19.93 cuerdas.....	Utuaño.....	6.90	6.00
5	Buenaventura Cuevas.....	45.45 cuerdas.....	do.....	16.20	6.00
5	Julio R. Brenes.....	5 cuerdas.....	Santa Isabel.....	25.00	12.50
5	Ramón Maldonado.....	38.02 cuerdas.....	Utuaño.....	13.80	6.00
5	Rafael Anselmi.....	12 cuerdas.....	Santa Isabel.....	15.00	8.75
5	L. C. Matta.....	8 cuerdas.....	Celba.....	16.00	8.00
Mar. 5	Jorge Silva.....	99.75 square meters.....	Aguadilla.....	12.00	12.00
5	Lorenzo Martínez.....	10 cuerdas.....	Adjuntas.....	16.00	12.00
5	Enrique M. Izquierdo.....	10 cuerdas.....	Dorado.....	10.50	10.50
5	Domingo Maldonado.....	28.84 cuerdas.....	Utuaño.....	13.98	6.00
5	Angel Figueroa.....	1.07 cuerdas.....	Juana Díaz.....	11.00	10.00
5	Manuel González.....	10.83 cuerdas.....	Utuaño.....	4.92	6.00
5	Monseratte Justiniano.....	437.70 square meters.....	Cabo Rojo.....	9.00	8.23
5	Carlos Armstrong.....	107.20 square meters.....	Ponce.....	20.00	9.00
Apr. 2	Pablo Soriano.....	36 square meters.....	do.....	3.00	8.33
2	Unites States Government.....	15,359 square meters.....	San Juan.....	1.00	.....
18	Guillermo González.....	16 cuerdas.....	Santa Isabel.....	50.00	16.00
24	Modesta Gambaro.....	448.55 square meters.....	San Juan.....	71.77	8.00
May 7	Juan Rosado Rivera.....	22.16 cuerdas.....	Utuaño.....	13.60	6.00
7	Cruz Rodríguez.....	38 square meters.....	Ponce.....	3.00	8.00
7	Isaac Ríos.....	6 cuerdas.....	Naranjito.....	4.80	8.00
7	Food commission.....	2,436.99 square meters.....	San Juan.....	1.00	.....
31	José Brenes.....	0.25 cuerda.....	Patillas.....	2.00	10.00
31	J. Vives & Co.....	72.56 square meters.....	Ponce.....	5.60	8.00
31	Jorge Remedios.....	101.50 square meters.....	do.....	8.12	8.00
31	Juan Flores.....	25 cuerdas.....	Lajas.....	16.00	8.00
31	Pedro J. Rivera.....	8.91 cuerdas.....	Salinas.....	12.50	13.89
30	Freeman Bernstein.....	2,000 square meters.....	San Juan.....	90.00	.....
June 4	Carmen Millán.....	25 square meters.....	Ponce.....	3.00	12.00
10	Iglesia Católica.....	1,043 square meters.....	San Juan.....	5.00	.....
	Total annual rent.....			948.57	

## THE INSULAR TELEGRAPH AND TELEPHONE BUREAU.

The greater part of this year has been devoted to the repair of the telegraph lines that were damaged by the storm of August 22, 1916, and to which no permanent repairs could be made before because the material ordered for that purpose was not received until the beginning of the present fiscal year, but some improvements have been made to the system during the year just ended.

Although it is of the greatest importance that most of the lines be repaired or reconstructed because of their present bad condition, it has not been possible to do so this year, nor will it be possible the next year for the lack of funds.

Before going into details, I wish to mention the difficulties experienced by this office in the extension of the system and in the upkeeping of the existing lines and



offices, due to the abnormal conditions in which we have been compelled to work and to the very small appropriation made by the legislature for the operation of the bureau and the repair and maintenance of the lines.

It is a well-known fact that the insular telegraph and telephone system is being extended from year to year; that new lines are built, new telephone exchanges are constructed and new telegraph offices are opened. The number of telephone subscribers has increased considerably during the last two years, and the volume of telegraph business handled during this year is the greatest since the telegraph lines were transferred to the insular government. It is also a well-known fact that the prices of all kind of telegraph and telephone material have increased to such a point as to become practically prohibitive.

In spite of these circumstances, the appropriations have been the same or may be less than previous years, if the extension of the system and the prices of the material are taken in consideration, and consequently they have been barely sufficient for the maintenance of the existing lines and but few betterments and improvements have been made.

With the installation this year of a telephone station at Guaynabo, the number of offices has increased to 75. There are also five branch offices in the island, namely, Marina and Santurce in San Juan; Aguirre and Playa Ponce in Ponce; and Playa Mayaguez in Mayaguez. There are also three outside stations that work in conjunction with the insular telegraph system, viz, naval wireless station at Puerta de Tierra in San Juan, wireless station at Ensenada, and Camp Las Casas in San Juan. Insular telegraph lines connect the first two of these with the system. Camp Las Casas has its own lines connected to those of the insular system.

#### WORK DONE DURING THE FISCAL YEAR.

Telegraph instruments were installed at Camuy and Santa Isabel. Prior to doing this all telegraph business to or from these two places was handled by the Porto Rico Telephone Co. on a 25 per cent commission basis, in accordance with a franchise granted to that corporation on August 25, 1914.

The following offices were rewired and supplied with new furniture and instruments, greatly improving their appearance: Salinas, Las Piedras, Juncos, and Maranjito. All these offices were also moved to better-situated and better-appearing locations than they had before.

The telegraph and telephone office at Caguas was also moved to better quarters and supplied with new furniture, giving it a much better appearance than the previous office in the old government house. This work took several days because it was necessary to do the moving without interfering with the local service to the subscribers.

The telegraph office at Ensenada, which was a branch of the Yauco office, was made an independent office because of the volume of business handled by it, and also because the distance from Yauco made it difficult for that office to keep the accounts of Ensenada.

A new telephone line was built from Rio Piedras to Guaynabo and a telephone office installed at the latter town, in accordance with an act of the legislative assembly approved April 12, 1917, appropriating the amount of \$2,000 for the job. With this new office the number of telegraph and telephone offices operated by the bureau was increased to 75.

The new telephone exchange for 10 subscribers, which was under construction at the end of the fiscal year at Corozal, was completed, but it had to be enlarged to 15 subscribers during this year on account of the increased demand for local telephone service at that town.

Telephone switchboards, with capacity for five subscribers each, were installed at Cidra, Guaynabo, and Las Piedras, in order to meet the demand for telephone connections in these towns. Although more than five subscribers could be obtained in Cidra and Guaynabo, no efforts have been made to obtain them because of the lack of funds to buy new and larger switchboards.

The telegraph and telephone line between Cayey and Caguas has been rebuilt and 139 new creosoted poles 6 by 6 inches by 24 feet have been added to it. This line was one of those badly damaged by the storm of August 22, 1916. The distance between the poles has been shortened, which became necessary on account of the number of wires on these poles at present.

During this year, as in the previous year, pamphlets and folders explaining the benefits offered by the telegraph service have been continuously distributed among the public in an effort to increase the business and, if possible, make all offices self-sustaining instead of operating some at a yearly loss, as at present.

A new lithographed telegraph blank for telegrams was printed to be used during Christmas and New Year, and an increase of \$267.09 was obtained for greetings telegrams, as compared with those sent during the same period the previous year.

All telegraph and telephone stations have been supplied with a map of the island showing all the insular telegraph and telephone lines and their routes, as well as those of the telephone company. This map furnishes a good guide for the employees, and being incased in a well-made frame adds to the general appearance of the office.

Curves have been plotted for all stations showing the increase and the decrease of the business in each one of them every year, with the idea of giving the agents a better knowledge of what the receipts of their stations have been, and to encourage them to make all possible efforts to increase the yearly receipts of their offices.

It was decided during this year to uniform the messengers for the good of the service and the convenience of the public, all of them to have uniforms of light-blue drill with dark-blue caps faced with the legend in English "Messenger insular telegraph," and each one defined by number. Those in San Juan and Ponce were uniformed in June, and the rest will be supplied with uniforms next month or as soon as the suits already ordered are delivered.

The old gravity battery in the Ponce office, composed of 200 Callaud battery jars, was replaced by an accumulator or storage battery, composed of only 20 jars. This means a reduction in the cost of operation, because the electric current consumed to charge the new battery, together with the cost of maintenance, is much less than the cost of the glass jars, zincs, copper, and bluestone necessary for the upkeep of the old gravity jars.

In the month of January, by request of the military authorities, a permanent day and night telegraph service was established in many of the towns in the island, especially in those around the coast. This service was continued to February 12.

To comply with this request it was necessary to hire 37 temporary employees, and as there were no vacant positions it was necessary to pay these employees from the appropriation for contingent expenses of the bureau. Thus an extra amount of \$347.28 was expended in emergency service not contemplated when preparing the budget for the year.

#### RECEIPTS AND EXPENDITURES.

Detailed statements of the revenues and expenditures of the bureau during the year are shown in Exhibits 33 and 34, attached to this report.

These statements of the business transacted during the year show total cash receipts of \$96,825.98, which, compared with \$86,996.17 for the previous year, shows an increase of \$9,829.81, while the net profits, after deducting the expenditures, amount to \$3,697.83, or less than the profits for the previous year. This is due to the high prices for material that have prevailed during the year and to the greater quantity of material that it has been necessary to purchase on account of the considerable increase in business and for the extension of the system. It is also due to the fact that several of the new telegraph offices opened during the last two years are operated at a loss, while the expenditures have considerably increased. Some of these stations were formerly operated by the Porto Rico Telephone Co. It should also be noticed that on account of abnormal conditions special work had to be performed, extra employees had to be engaged, and consequently extra expenses were incurred.

Taking credit for the half-free rate and business, the total income for this year is \$113,172.96, or \$19,200.51 more than the previous year. The total number of messages transmitted during the year was 269,660, or 16,740 more than the previous year.

The following statement shows the financial operation of the bureau during the fiscal year:

EARNINGS.	
Cash income.....	\$96,825.98
Value of half-rate messages.....	7,577.63
Value of free messages.....	8,769.35
	<u>\$113,172.96</u>
EXPENDITURES.	
Operation of system.....	78,880.48
Repair and maintenance of lines.....	14,249.67
Reconstruction and extension.....	6,292.57
	<u>99,422.72</u>
Difference.....	13,750.24

The foregoing statements show that there is a balance of \$13,750.24 of income over expenditures, or \$3,577.83 more than the previous year. Disregarding the value of half-rate and free messages, there is a loss of \$2,596.74 of cash receipts over total expenditures; but if the improvements and extensions are disregarded, there is an excess of \$3,695.83.

The value of the telegraph and telephone system being fixed at \$132,207.93, as per the report of the auditor for the last year, the net earnings for the year give a return of 10.4 per cent on this valuation. Assuming that the annual depreciation amounts to

one-fifteenth of the value of the property, the amount of depreciation would be \$8,813.86, which, subtracted from the sum of \$13,750.24, which is the excess of gross earnings over total expenditures, will leave a balance of \$4,936.38 net profit to the government, or about 4 per cent on the investment.

Of the 75 offices operated during the year, 30 were operated at a profit, counting cash receipts only, 11 of these being operated by the Porto Rico Telephone Co. on the usual percentage basis, and 45 offices were operated at a loss, counting cash receipts only; but, taking credit for the value of half-rate and free messages, 39 offices were operated at a profit and only 36 offices at a loss.

#### INTERCHANGE OF TELEPHONE MESSAGES.

According to a franchise granted on August 25, 1914, the Porto Rico Telephone Co. is under obligation to connect its central exchanges, at such points as may be required by the commissioner of the interior, with lines of the insular telephone system, and to provide for the interchange and handling of business of the insular telephone lines by the local exchanges, long-distance lines, and other facilities of the company.

For such interchange of business a remuneration of 5 cents for each message period or fraction thereof, in addition to the regular monthly rental charge to regular subscribers to local exchange service, was to be apportioned to the company on calls originating on lines of the insular telephone system whose destination is within the territory served by the local exchange of the grantee through which the connection was to be made.

The Porto Rico Telephone Co. understood by this disposition that a double remuneration of 5 cents each should be apportioned to the company on calls originating within the territory served by a local exchange of the grantee and whose destination was also within the territory served by another local exchange of the grantee, but which call required the use of a long-distance telephone line of the insular telephone system all the way between the said two local exchanges; that is, 5 cents at the originating point and 5 cents at the destination point for each message period or fraction thereof.

The matter was taken up with the telephone company by the superintendent of the insular telegraph on several occasions in an attempt to convince the company of the misinterpretation of the franchise, and this year the commissioner of the interior decided to submit the case to the public-service commission, which decided that such double charge was illegal, and an order was issued to the telephone company to stop same immediately. The attorney general was requested to institute proceedings against the company in case of violation of the order. An itemized account will be rendered the company for the amount overcharged as soon as all the monthly telephone statements rendered by the company are revised.

#### RECOMMENDATIONS.

Considering that the extension of the lines of the Porto Rico Telephone Co. to towns where the insular telegraph and telephone system has its lines and offices results in a competition that reduces the receipts of the bureau to such an extent that it causes a loss, it is recommended that in order to compete favorably with the telephone company and to reduce the losses to a minimum a new telegraph rate be established according to distances instead of a flat rate, as at present. If this proposition is not satisfactory, it would be desirable to reduce the telegraph rate between certain towns where the telephone rates are so low that the public prefers to use the telephone for communications instead of the telegraph, which costs more. As an example of this, take the towns of Manati and Ciales, where a telegram of only 10 words costs 25 cents and a telephone communication of 3 minutes costs only 15 cents. As a result of this condition, the public uses the telephone instead of sending telegrams, unless it is a case of too much importance or urgency that admits no delay. There are several other towns in the same condition, where the telegraph business has been reduced to a minimum, and if the rate is reduced to compete with that of the telephone it is very probable that more business can be obtained.

I respectfully invite attention to the fact that the receipts of the bureau are increasing from year to year and that in the year just ended they amounted to \$113,172.96, which amount is approximately \$20,000 more than the amount for the previous year. In view of this considerable increase, and in order that the business may be properly handled with the promptness expected, it is very necessary to extend the system by building new lines, opening new offices, and increasing the number of employees. It is also necessary to repair and put in first-class shape all the existing lines, which can not be done on account of the lack of funds. Due to the very small number of lines at present, a great part of the telephone service is lost because of the impossibility of accommodating all persons desiring such service. When any extraordinary event occurs in the island and the telegraph is used more than is customary, the business is

considerably delayed and all the offices are congested for hours because of the lack of lines and employees for the quick handling of messages. It being impossible to make the necessary extension with the small annual appropriations, it is recommended that a special appropriation be requested for this purpose.

I wish to renew the recommendation made last year that an effort be made to obtain a suitable and ample location in the Federal building in La Marina, in San Juan, and either move the main telegraph office to that building or enlarge the one installed there now so that it may correspond to the necessities of that commercial district.

There is another important matter which I desire to mention, and that is the salaries of the telegraphers. These employees have more working hours assigned than any other class in the government service, and they are perhaps the ones most poorly paid. Telegraph operators work every labor day from 8 a. m. to 8 or 9 p. m., and they also have to work certain hours on Sundays and holidays. On different occasions of frequent occurrence they have to work constantly until late at night, Sundays included, and for such service they receive no extra pay. It may be said that their work is not hard, but it is perhaps the most important and of great responsibility, requiring great care and good judgment.

In consideration of this, I recommend that their salaries be increased proportionally, not only to recompense them for their work but for the benefit of the service. Due to the small salaries now paid, they always endeavor to obtain other employment where they can get better salaries, and as a consequence the best operators have already left the bureau and others are leaving it every day.

If their salaries can not be increased, it is recommended that an appropriation be obtained to pay them for the work performed during extra hours.

The budget for the bureau provides for three relief operators to take the place of telegraph operators who have been granted leave of absence on account of vacation or sickness. Considering that there are about 200 employees in the bureau, including officials, clerks, telegraph and telephone operators, and that all employees should be given a vacation at least once a year, and that those who become sick must be relieved at once, three relief employees are not enough for the needs of the bureau. Since, however, telegraph operators can not well take the place of clerks, linemen, etc., it would be better, instead of increasing the number of relief operators, to hire temporary employees of the class required when necessary and have a special fund from which they could be paid. It is therefore recommended that an appropriation of \$3,000 per annum be provided for this purpose.

#### HARBORS AND DOCKS.

The division of harbors and docks is charged with the supervision of shipping and pilotage at the various ports and the collection of harbor dues and wharfrage. The law provides that the chief of division of the San Juan harbor board shall also act as the chief of the division of harbors and docks.

There are 10 ports in the island at which 10 or more pilots are stationed, and captains of the port are stationed at San Juan, Ponce, and Mayaguez. In these three ports collections are made by the captains of the port, and in Guanica, Aguadilla, Arroyo, Humacao, Fajardo, Arecibo, and Guayanilla by the chief pilots.

#### COMPARISON OF SHIPPING WITH PREVIOUS YEAR.

Owing to the necessities of the war, there was a considerable decrease in the number of vessels and tonnage arriving at most of the ports of the island during the year. The total number of ships decreased 18.6 per cent and the gross tonnage 25.2 per cent, as compared with last year. The greater part of the decrease was in foreign shipping, the number of foreign registry being only 45.5 per cent and the tonnage 54.3 per cent of that of last year, while the number of American vessels decreased 7.2 per cent, although the corresponding gross tonnage fell off 19 per cent. This was due to the transfer of a number of larger vessels engaged in the West Indies trade to war service, while smaller vessels took their place. None of the ports show an increase of gross tonnage over last year, although Ponce and Guanica have an increase in the number of vessels of 3.6 per cent and 9 per cent, respectively.

The total number of ships entered was 1,550 and the total tonnage 3,810,094 tons, details of which for each port are shown in the attached statement. The percentage of the tonnage received at each port was as follows:

	Per cent.		Per cent.
San Juan.....	33.8	Arroyo.....	4.7
Ponce.....	18.1	Humacao.....	3.6
Mayaguez.....	16.4	Fajardo.....	2.7
Guanica.....	12.5	Arecibo.....	2.0
Aguadilla.....	5.6	Guayanilla.....	.6

## RECEIPTS AND EXPENDITURES.

The total income for the year from all harbors and docks of the island amounted to \$46,389.18, which was a decrease of 17.1 per cent over last year. The details for each port are given in Exhibit 32, attached. All ports show a considerable decrease in receipts over last year except Ponce, where the decrease was only 0.6 per cent. The collections at San Juan amounted to 51.4 per cent of the total receipts from this source. Ponce stood second with 18.3 per cent of the total. The total expense of the division for salaries was \$7,406.11, which shows a credit balance of \$38,983.07.

## PONCE MUNICIPAL DOCK.

The damage done to the extreme end of the Ponce municipal dock last year by a head-on collision of an iron steamer is being repaired at a cost of over \$5,000. The steamer penetrated more than 10 feet through the concrete floor of the pier, bending and twisting 24-inch and 30-inch beams and destroying one cylinder foundation pier. The expense of the repairs will be repaid to the municipality of Ponce by the steamship company.

## SAN JUAN WATER FRONT.

The small plaza on the water front of San Juan between the ferry house and pier No. 1 is being graded, and concrete walks have been provided to accommodate the large amount of travel to the piers and ferryboats.

## DREDGING SAN JUAN HARBOR.

The Federal Government advertised for bids for the dredging of San Juan Harbor, but only one bid was received, and at this writing it is understood that the work will probably be done by administration. The complete work of dredging is estimated to cost \$850,000, but only \$400,000 has been appropriated at this time by Congress. After the completion of the dredging the insular government, through a law enacted by the last legislature, has agreed to repay \$600,000 to the Federal Government in yearly installments of \$50,000. Swamp lands adjacent to the harbor, embracing 232 acres, are transferred to the insular government, and the proceeds of the sale of these lands should amount to much more than the sum to be paid to the Federal Government. The improvement contemplated in the capacity of the port of San Juan is indicated by the fact that the area of the harbor having a depth of 24 feet or more will be increased four and one-third times and the area with a depth of 30 feet will be increased twelve and three-fourths times that at present.

## RECOMMENDATIONS.

There have been no improvements in the port facilities of the island during the year, and many structures are badly in need of repairs.

The passenger wharves at both Ponce and Mayaguez are in a very bad condition, and at each place the depth of water has become so shallow that the wharves are of little use. They should be rebuilt and extended in a substantial manner.

The roadways adjacent to the water front in both of the above ports, and which are under the control of the insular government, should be repaired and placed in a passable condition.

Harbor structures and approaching roadways in all of the ports except San Juan and Ponce are in a state of dilapidation owing to the lack of an appropriation to provide for repairs and renewals. No appropriation has been made since 1912 that could be applied to the ports in general, although the last legislature made appropriations of \$3,000 and \$1,500 for reconstruction and repairs to the small piers at Culebra and Vieques, respectively. All of these ports have small landing piers for the use of vessels when anchored in the harbor, but the piers are built of wood and rapidly deteriorate, and are in constant need of repairs. They should be reconstructed of concrete in a substantial manner so that future repairs would be light.

An appropriation of \$10,000 is recommended for construction purposes and an additional sum of \$2,000 per year for necessary repairs, both sums to apply to all ports of the island outside of San Juan, which is properly cared for through the provisions made for the San Juan harbor board.

*Number of vessels and tonnage entered at ports, Porto Rico, year ended June 30, 1918.*

Vessels.	San Juan.		Ponce.		Mayaguez.		Arroyo.		Humacao.	
	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.
American:										
Steam.....	30 <sup>c</sup>	1,939,888	172	574,353	162	588,233	7	179,633	45	133,717
Sail.....	60	39,158	17	11,702	10	3,233	3	1,663	5	2,066
Foreign:										
Steam.....	105	225,977	42	108,533	33	41,037			2	5,170
Sail.....	38	4,094	33	4,595	16	995	1	155	6	701
Total.....	512	1,308,937	264	699,183	221	633,498	61	181,451	58	141,654

Vessels.	Fajardo.		Aguadilla.		Arecibo.		Guanica.		Aguadilla.	
	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.
American:										
Steam.....	36	102,580	63	196,104	24	75,296	267	478,163	12	21,999
Sail.....	3	1,370	2	1,714	3	1,657	5	3,355		
Foreign:										
Steam.....			13	18,895			1	2,164		
Sail.....	6	764								
Total.....	44	104,814	78	216,713	27	76,353	273	483,682	12	21,999

#### RECAPITULATION.

Vessels.	Number.	Gross tons.
American:		
Steam.....	1,147	3,329,076
Sail.....	108	65,318
Total American vessels.....	1,255	3,394,394
Foreign:		
Steam.....	196	404,496
Sail.....	90	11,204
Total foreign vessels.....	295	415,700
Total of all vessels.....	1,550	3,810,094

#### SAN JUAN HARBOR IMPROVEMENTS.

The San Juan Harbor board consists of the commissioner of the interior who acts as chairman, the mayor of San Juan and three members appointed by the governor, as follows: Mr. Waldemar E. Lee, Mr. José Ruiz Soler, and Mr. Edward Ferrer. Twelve regular and fifteen special meetings were held during the year. The board has general control over all harbor and terminal improvements at San Juan excepting the harbor dredging, which is planned to be done by the Federal Government, and also supervises the maintenance and operation of the San Juan bulkhead and the extensive freight-receiving shed which was built under its supervision. Marginal and connecting streets have also been built by the board, and adequate terminal tracks and yards have been constructed by the American Railroad Co. under plans prepared by the board.

The funds controlled by the harbor board consist of the proceeds of \$500,000 in bonds issued in 1912, additional bonds to the amount of \$100,000 issued in 1917, and the harbor dues of the port of San Juan, together with the storage and wharfage charges collected at the bulkhead and freight shed. An act of the legislature of 1912 provided that the proceeds from the lease or sale of certain lands adjacent to the bulkhead should be devoted to the use of the harbor board, but a law of the last session diverts such money to the construction of a capitol building.

## WORK DONE DURING THE YEAR.

A new road was completed during the year from the bulkhead shed to Covadonga Boulevard. The work was done under contract and cost \$7,240.82. The roadway is of macadam, 800 feet long and 20 feet wide. For most of the distance it was constructed across a swamp with a depth of soft mud of about 15 feet, necessitating a special foundation which was formed of condemned concrete-covered piles and brush facines. There has been very little settlement, notwithstanding the heavy traffic which has passed over the road. It is the intention of the board to resurface all of the macadam pavement on the marginal street with asphalt, as the traffic, which consists largely of heavily loaded trucks, is entirely too heavy for the macadam. The portion of the marginal street from Pier No. 2 to C street was surfaced with asphalt, the work being done by administration under the direction of the bureau of public works, using prison labor. The total cost was \$565.40, the cost per square meter was \$0.17, and the number of square meters surfaced was 3,340.

Plans and specifications were prepared for an extension of the bulkhead from a point 75 feet east of Pier No. 2 to the east side of Pier No. 1, and bids will be opened on August 1. This extension of the bulkhead is on the most congested portion of the water front, and together with the widening and completion of the paving of the marginal street to Pier No. 1 will greatly facilitate the traffic of the port.

During the year the American Railroad Co. completed all of the sidetracks along the water front and the bulkhead shed as required by the plans, and every warehouse and wharf in this vicinity can now be conveniently served by the railroad, and merchandise can be transferred direct from vessels to cars or vice versa through the entire bulkhead.

## OPERATION OF THE BULKHEAD.

Until January of this year the operation of the bulkhead and freight shed, together with the collection of storage charges, was under the direction of the captain of the port of San Juan, but new rules in regard to the operation were adopted by the board and approved by the Executive Council in January. Under the new regulations, a treasurer appointed by the board on January 17, 1918, attends to the collection of all storage charges on the bulkhead and in the shed. Current expenses of operation and maintenance are paid from the money collected which is placed in the wharf and harbor fund, the net proceeds being transferred every three months to the San Juan Harbor fund together with the receipts from the San Juan Harbor dues. This trust fund constitutes a sinking fund from which is also paid the interest on the bonds issued for harbor improvement, which now amount to \$600,000.

Owing to war conditions, the receipts from the bulkhead and shed were very much below what might be expected in normal times. The insular food commission took over one-third of the shed in July, 1917, and occupied it without any rental until February, 1918, but subsequently paid the nominal sum of \$150 per month. The remaining two-thirds of the shed was turned over to the United States Army Quartermaster in February and occupied by him until July, 1918, in connection with the United States training camp established at San Juan. As rental was paid by the quartermaster it will be observed that the harbor board received practically no income from the shed for the greater part of the year.

The following is a statement of the various funds handled by the board:

*Wharf and harbor fund.*

Balance July 1, 1917.....	\$2,506.30
Collections during the year from bulkhead and shed.....	7,810.20
	<hr/> 10,316.50
DISBURSEMENTS.	
Salaries and wages.....	2,017.16
Fees to members of harbor board.....	495.00
Repairs to bulkhead shed.....	1,081.65
	<hr/> 3,831.66
Total current expenses.....	3,831.66
Transferred to the San Juan Harbor trust fund.....	6,484.84
Total.....	<hr/> 10,316.50

*San Juan Harbor trust fund.*

Balance July 1, 1917.....	\$82,034.63
San Juan Harbor dues for year.....	28,834.80
Net receipts from bulkhead and shed transferred.....	6,484.84
Accrued interest on bonds.....	1,957.81
	<hr/> 114,312.08
Interest on \$600,000 at 4 per cent.....	24,000.00
Balance.....	<hr/> 90,312.08

*Construction fund.*

Balance July 1, 1917.....	\$21,080.04
Proceeds of \$100,000 of 4 per cent bonds.....	100,270.00
	<hr/> 121,350.04
Disbursements during year:	
Salaries and supplies.....	\$798.38
Drafting.....	900.00
Unexpended property.....	342.51
Surveys and inspection.....	1,680.15
Paid to contractors:	
Balance on bulkhead shed.....	5,700.57
Construction, marginal street.....	6,276.93
Construction, road to Covadonga Boulevard.....	7,806.22
	<hr/> 21,454.76
Balance on hand.....	99,895.28

*Total expenditures of the harbor board to June 30, 1918.*

Administration.....	\$14,084.05
Drafting.....	13,448.72
Surveys.....	2,018.49
Inspection.....	22,876.57
Supplies, advertising, and printing.....	2,280.20
Unexpended property.....	2,116.18
	<hr/> 56,774.21
Construction:	
Bulkhead.....	\$325,343.65
Streets and paving.....	20,894.02
Bulkhead shed.....	34,472.45
Dredging.....	19,440.31
	<hr/> 449,150.44
Total.....	505,924.65

**WORK UNDER CONSIDERATION.**

The extension of the marginal street, at least as far as the San Antonio Dock, is badly needed, and will probably be undertaken by the board during the year. The estimated cost of this roadway is \$10,500, if extended to San Antonio Dock, and \$15,000 if continued to San Andres Street.

The improvement of C Street and of other streets approaching the water front is necessary to facilitate traffic. The streets in question are under the control of the insular government.

A better water supply for fire protection and the use of vessels is needed along the water front and particularly at the bulkhead shed. The present pipes are only 2 inches in diameter and carry water from a great distance from the main supply pipe, consequently the pressure is not sufficient for fire purposes. The cast-iron pipe necessary for this work was ordered by the board along with other water pipe to be purchased by the municipality of San Juan, through the War Department in connection with the military encampment, but the plans of the municipality were changed and the order for pipe was never placed. This work will have to be carried out in the near future.

A small amount of dredging still remains to be done along the bulkhead between Piers Nos. 2 and 5. It is expected that this work, which it is estimated will cost \$2,500, can be done to advantage when the Federal Government undertakes the work of dredging the harbor.

The year has again demonstrated the necessity of the improvement of the basin lying between the east end of the bulkhead shed and the San Antonio Dock. Notwithstanding the falling off in shipping during the year, the piers and wharves as well as the street in the vicinity of Piers No. 1 and No. 2, were constantly blocked with merchandise and lumber, and if some of this traffic could be moved farther east, the situation would be much relieved.

**NEW IRRIGATION PROJECTS.**

The investigation of certain new irrigation projects was authorized by the acts of the legislative assembly, approved April 13, 1916, appropriating \$20,000 for the purpose of making a study of the irrigation of the lands in the districts of Ponce and Juana Diaz, and \$8,000 for the study of methods to irrigate the lands of the Lajas Valley, utilizing waters of the San German River, and the lands in the municipality of Isabela, utilizing waters from the Guajataca River. In April, 1917, an additional appropriation of \$12,000 was made to continue the investigations in the Lajas and Isabela districts.



The last legislature passed an act approved February 21, 1918, appropriating \$8,000 to complete the investigations for irrigating the lands of the Lajas Valley and the lands in the vicinity of Isabela, but owing to the lack of funds in the insular treasury this appropriation did not become available. In order that the investigations might be completed a transfer of \$2,000 was made from the appropriation for salaries, office of the commissioner of the interior, and the Governor of Porto Rico authorized a transfer of \$3,200 from the funds at his disposal to this appropriation, making a total to date of \$25,200 for work in the districts of Lajas and Isabela.

The report for the preceding fiscal year describes the organization of the parties and the preliminary surveys, including the studies in the Ponce-Juana Díaz district. Work in the latter district during the present fiscal year was confined to stream gage measurements which were discontinued when the funds appropriated for the district were expended.

The preliminary surveys were completed May 6, and all field parties discharged with the exception of the stream gager and six gage observers whose services were retained until June 30, 1918. Sufficient data have been secured to give a basis for estimates of cost of construction, the amount of irrigable land, and the available water supply. Stream measurements, however, cover a relatively short period and should be continued, if possible, as the cost will be small, and additional data of this kind will be of great value in the final determination of plans and methods of construction and operation.

#### LAJAS DISTRICT.

The investigations in this district have for their object the development of a project for utilizing the flow of the San German River and others in the irrigation of lands in the valley of Lajas.

This valley is situated in the southwest corner of the island near the town of the same name. It is about 16 miles in length and parallels the south coast, from which it is separated by a low range of hills. It is one of the driest sections in Porto Rico, the mean annual rainfall at Guanica, near the eastern end of the valley, being but 34 inches, with an average of 2.1 inches per month for eight months of the year. The principal crop is sugar cane, which is raised on the lower lands where water for irrigation can be secured by pumping, and to a limited extent on the hills.

The bottom lands are very flat, and the greater part of the run-off from the watershed is retained in a large swamp called the "Anegado," which has no outlet to the sea, and in Guanica Lake, at the eastern end of the valley. Water for irrigation is pumped from these lakes and from wells, and the supply apparently depends entirely upon the rainfall in the valley, for in periods of drought the water table is rapidly lowered, so that pumping becomes very expensive and often impracticable.

#### IRRIGABLE LANDS.

There are about 15,000 acres of irrigable land in the valley between Susua River and Boqueron. If cheap electric power is developed in connection with the proposed irrigation system, it will prove economical to use the gravity water supply to furnish the amount of water that may be needed for the irrigation of the higher lands that can not economically be irrigated by pumping; reclaim the lands now under water by draining the Anegado into Guanica Lake, increasing the storage capacity of the latter if necessary, and irrigate all the lower lands by pumping. In this manner all of the irrigable land of the valley can be placed under cultivation.

#### DUTY OF WATER.

The quantity of irrigation water necessary for the successful cultivation of sugar cane depends upon the number of irrigations required, and the amount of water necessary for each application. Owing to differences in rainfall, character of soils, and methods of cultivation and irrigation, a uniform duty of water will not give satisfactory results in all parts of the district. It is probably that a better method would be to vary the amount of water per acre allotted to each tract according to its individual requirements, giving due consideration to the possibility of supplementing the supply by pumping, and tax each tract in proportion to the amount of water allotted to it.

The general climatic conditions in Lajas Valley are similar to those in a large part of the present irrigation district on the south coast. For that reason and in order that a comparison of costs may be made, the same duty of water, viz: Four-acre feet per acre per annum—is used in the present estimates. Four-acre feet are equivalent to 1,303,404 United States gallons. With all canals lined the duty at the reservoir will be about 4.5 acre-feet per acre per annum.

The capacity of the proposed San German Reservoir is relatively much greater than that of the reservoirs in the irrigation district, so that the distribution of water can be made much more flexible and it will not be necessary to make delivery at a uniform monthly rate. This will enable water users to have their water stored during rainy periods, when irrigation is not necessary, and have it delivered at an increased rate during the dry months, thus increasing the beneficial use of the water.

## WATER SUPPLY.

From a study of the stream-flow records of the San German River it was seen that the annual discharge of that river at a point where it could be diverted to the Lajas Valley was not sufficient for the irrigation of all the irrigable land in the valley. Gages were therefore established on the other rivers tributary to the San German, as well as on those streams near Maricao and on the Anasco River near Las Marias.

When surveys were made it was found that the only streams which could economically be diverted to a reservoir at San German were the Cain River, which joins the San German River a few miles below the dam site, and the Potrero, Lajas, and Guaba Rivers, which are small streams of the northern watershed.

The record of flow for these rivers in acre-feet is as follows:

FLOW OF SAN GERMAN RIVER AT DAM SITE.

Month.	1908	1909	1910	1916	1917	1918	Mean.
January.....		1,754	1,065		562	686	1,027
February.....		1,164	682		608	894	837
March.....		714	516		480	883	648
April.....		807	664		944	2,916	1,331
May.....		1,995	790		1,236	14,808	4,707
June.....		2,632	869		8,086	7,911	4,874
July.....		2,651	1,698		4,935		3,096
August.....	1,339	9,300	2,076		4,464		4,296
September.....	1,878	3,724	5,915	8,403	6,740		5,332
October.....	1,712	6,644	8,318	14,654	3,107		6,887
November.....	3,818	13,233	5,024	5,880	1,783		6,170
December.....	2,604	2,005	1,174	1,320	2,253		1,871
Total.....	11,351	47,734	28,821	30,257	35,198	28,098	41,074

The estimated drainage area of the San German River is 34 square miles and the maximum recorded flow is 5,500 second-feet.

CAIN RIVER (EXCLUSIVE OF FLOODS).

	1917	1918		1917	1918
January.....		187	August.....	880	
February.....	149	197	September.....	649	
March.....	184	163	October.....	571	
April.....	365	571	November.....	333	
May.....	399	737	December.....	571	
June.....	497	768			
July.....	513		Total.....	5,111	2,653

Estimated yearly flow, 5,300 acre-feet.

The combined flow of Potrero, Lajas, and Guaba Rivers, excluding all flow in excess of 150 second-feet, which is the capacity of the proposed diversion canal, is as follows:

	Acre-feet.		Acre-feet.
1917.		1918.	
July.....	1,206	February.....	466
August.....	1,330	March.....	466
September.....	1,485	April.....	1,244
October.....	2,206	May.....	3,182
November.....	1,288	June.....	3,866
December.....	824		
		Total.....	17,887
1918.			
January.....	426		

The combined drainage area of these three streams is 5.1 square miles, and the rainfall is about the same as at Maricao and Las Marias, which are the nearest weather bureau stations, and have a mean annual rainfall of 98 and 107 inches, respectively.

The figures given for the Cain, Potrero, Lajas, and Guaba Rivers represent the amount that can be diverted to the San German Reservoir without storage basins—that is, exclusive of floods above the capacity of the proposed diversions canals. The actual amount available would be greater than is shown above, for the gauge observers fail to report many minor floods, and those floods which occur at night.

On the basis of 4.5 acre-feet per acre per annum at the reservoir it is estimated that the water supply will be sufficient for the irrigation of the following acreage:

San German River.....	acres..	8, 000
Cain River.....	do.....	1, 000
Potrero, Lajas, and Guaba Rivers.....	do.....	3, 000
Total.....	do.....	12, 000

#### WATER RIGHTS AND CONCESSIONS.

There are no existing water rights or concessions for irrigation on the San German River above the proposed dam site, and although there are several concessions on the lower reaches of the river, most of which are for pumping plants, water is used only for a short time during exceptionally dry periods, and it is believed that the flow of the streams entering the river below the dam site will be sufficient to meet the requirements of these concessions. There is a concession for industrial purposes on the Guaba River in which water is used during the day time in the coffee season, but it will not seriously interfere with the available supply from that river.

#### DESCRIPTION OF FEATURES.

The principal features of the proposed development are as follows:

A dam on the San German River, forming a reservoir with sufficient storage capacity to permit of the utilization of the annual river flow; a tunnel 7,400 feet long from the reservoir to the Lajas Valley; the distribution system of canals and laterals to deliver water to the irrigable lands; the diversion of the Cain River; the diversion of the Potrero, Lajas, and Guaba Rivers; the hydroelectric system.

#### DAM AND RESERVOIR.

The site selected for a dam is at a point just below the junction of the Cupeyes and San German Rivers, and 500 feet below the ford on the insular road from San German to Sabana Grande. The river at this point flows through a flat gravel bed 750 feet wide, and the bedrock in the low hills on either side is covered with from 10 to 25 feet of clay and toska. The proposed dam is to be of earth, with a maximum height of 80 feet above the river bed and with the spillway level 15 feet below the crest, forming a reservoir with an area of 923 acres, and a capacity of 21,000 acre-feet, of which 20,000 acre-feet will be above the level of the tunnel intake and available for diversion to the irrigable lands.

The main dam will be 1,795 feet long on the crest, and there will be two dikes with an aggregate length of 2,323 feet and a maximum height of 41 feet. The total volume of dam and dikes will be 517,000 cubic meters. A spillway 300 feet long, cut through the hill near the north end of the dam, will require excavation of about 55,000 cubic meters of rock which can be used in the construction of the dam.

A concrete cut-off wall will be built along the center line of the main dam, extending down into rock to cut off filtrations and with the top high enough to make a good bond with the impervious central section of the dam. The material will be excavated by steam shovels and transported to the dam in cars, and the outer or semiporous sections of the dam built up in layers. The base of the middle section will be stripped to impervious material, and this section built up by sluicing down selected material from the outer embankments into a pool maintained in the middle of the dam. During the period of construction, the river flow will be diverted through a tunnel with a section 20 by 20 feet and 300 feet long, driven through the solid rock near the north end of the dam.

A large part of the area to be submerged is planted in cane, but most of the land is of very poor quality. The Sabana Grande branch of the American Railroad follows the valley forming the reservoir site and crosses the river on a pile trestle 1 mile above the dam site at an elevation of 25 feet above the grade of the diversion tunnel. It is proposed to replace this railroad with a line around the south side of the reservoir requiring about 7 kilometers of new construction. The capacities of the diversion

tunnel and of the reservoir at the elevation of the lowest point in the present line are sufficient to handle the largest recorded flow without interfering with the operation of the railroad during the construction of the dam.

About 5 kilometers of new carretera will be required to replace that part of the present highway which will be submerged.

#### TUNNEL TO LAJAS VALLEY.

Using a maximum cut of 20 feet for the tunnel approaches, the length of this tunnel will be 7,400 feet, and by sinking a shaft 102 feet deep at a point 1,470 feet from the outlet end the length to be driven from two headings can be reduced to 5,930 feet. The tunnel, which apparently will be in solid rock, will have a cross-section area of 35 square feet, and if unlined will have a minimum capacity of about 112 second-feet when running full without pressure head from the reservoir.

The draft from the reservoir will be regulated by a gate located in the tunnel near the entrance and operated through a shaft.

#### DISTRIBUTION SYSTEM.

The tunnel outlet will be at an elevation 175 feet above the sea level or about 75 feet above the level of the railroad station at Lajas. Preliminary canal lines were run east and west from the tunnel outlet. The canal to the west would be about 15 miles long to command 8,000 acres of irrigable land, while a canal to the east 10 miles in length will command about 4,000 acres of irrigable land. All canals and laterals should have a capacity at least 75 per cent in excess of that required for a uniform continuous flow, and the estimate of cost provides for this capacity and for concrete structures and lining for canal and laterals.

#### CAIN DIVERSION.

The diversion of the Cain River to the San German Reservoir will require the construction of 4.38 miles of canal, three tunnels aggregating 2,940 feet in length, and six concrete siphons with a total length of 3,200 feet, with a capacity of about 40 second-feet.

#### GUABA-LAJAS-POTRERO DIVERSION.

The diversion of these streams will require 2.15 miles of canal, preferably concrete lined and covered, and four tunnels with a total length of 10,780 feet. The longest of these will be the tunnel from the Potrero River to the Cruces River, which will be 6,500 feet in length and pierce the main divide of the island under Cerro Gordo Mountain. The canals and tunnels from the Guaba River to the Lajas River should have a capacity of 100 second-feet and from the Lajas River to the intake of the tunnel 150 second-feet. Electric power for use during the construction of the tunnels can be developed at a small cost at a water fall on the Lajas River near the point of diversion.

#### ESTIMATED COST.

The following estimates are based upon the current prices for labor, materials, machinery, and transportation:

#### SAN GERMAN RESERVOIR DAM AND DIKES.

Excavation, stripping, 35,000 cubic meters, at \$0.75.....	\$26,250	
Excavation, cut-off trench, 6,200 cubic meters, at \$3.....	18,600	
Embankment, 517,000 cubic meters, at \$0.75.....	387,750	
Concrete cut-off wall, 4,900 cubic meters, at \$18.....	88,200	
Paving upper face and crest, 48,000 square meters, at \$0.75.....	36,000	
Excavation, open cut, 8,000 cubic meters, at \$1.25.....	10,000	
Excavation, tunnel and shaft, 3,770 cubic meters, at \$10.....	37,700	
Concrete, 635 cubic meters, at \$20.....	12,700	
Sluice gate.....	2,000	
		\$62,400
Spillway excavation, 55,000 cubic meters, at \$1.....	55,000	
Spillway concrete, 60 cubic meters, at \$18.....	1,080	
		56,080
Change in carretera, 5 kilometers, at \$5,000.....	25,000	
Change in railroad, 7 kilometers, at \$20,000.....	140,000	
		165,000
Right of way and damages, 90 acres, at \$150.....		148,000
Total.....		988,280

## TUNNEL TO LAJAS VALLEY.

Excavation, open cut, 9,000 cubic meters, at \$1.....	\$9,000
Tunnel, 7,400 linear feet, at \$35.....	259,000
Gate shaft and gates.....	6,000
	<b>\$374,000</b>

## DISTRIBUTION SYSTEM FOR 8,000 ACRES.

Excavation, canal and laterals, 43,000 cubic meters, at \$0.60.....	85,000
Concrete lining, 7,400 cubic meters, at \$20.....	148,400
Concrete bridges, 960 cubic meters, at \$20.....	19,200
Concrete siphons, 660 cubic meters, at \$22.....	16,500
Outlets and modules.....	12,000
Telephone lines.....	4,500
Ditch rider's houses.....	2,400
Fencing, 44 miles, at \$300.....	13,200
Right of way and damages, 80 acres, at \$150.....	12,200
<b>Total.....</b>	<b>314,000</b>
Cost for additional 1,000 acres.....	11,000
Cost for additional 3,000 acres.....	163,000
<b>Cost for distributing system for 12,000 acres.....</b>	<b>488,000</b>

## CAIN DIVERSION.

Tunnels, 2,940 linear feet, at \$0.25.....	73,500
Excavation canal, 30,800 cubic meters, at \$0.75.....	23,100
Concrete, 1,283 cubic meters, at \$20.....	25,860
Concrete pipe in place, 3,200 linear feet, at \$6.....	19,200
Fencing.....	3,000
Right of way and damages.....	2,700
	<b>147,360</b>

## GUABA-LAJAS-POTRERO DIVERSION.

Tunnel, 1,650 linear feet, at \$25.....	41,250
Tunnel, 2,520 linear feet, at \$30.....	75,600
Tunnel, 6,500 linear feet, at \$35.....	227,500
Canal, 11,350 linear feet, at \$8.....	90,800
Diversion dams.....	12,000
Right of way and damages.....	3,000
	<b>450,150</b>

## \* SUMMARY OF ESTIMATED COST.

	For 8,000 acres.	For 9,000 acres.	For 12,000 acres.
San German Reservoir.....	\$988,280.00		
Tunnel to Lajas Valley.....	274,000.00	\$1,262,000.00	\$1,262,000.00
Distribution system.....	314,000.00	325,000.00	488,000.00
Cain diversion.....		147,360.00	147,360.00
Guaba-Lajas-Potrero.....			450,150.00
Engineering and contingencies.....	157,628.00	173,736.00	234,751.00
<b>Total estimated for construction.....</b>	<b>1,733,908.00</b>	<b>1,907,796.00</b>	<b>2,862,261.00</b>
Net interest charges during construction (3 years) and for first year of operation.....	270,000.00	290,000.00	400,000.00
Operation and maintenance (1 year).....	20,000.00	21,000.00	34,000.00
<b>Total cost to end of first year of operation.....</b>	<b>2,023,908.00</b>	<b>2,218,896.00</b>	<b>3,006,261.00</b>
<b>Cost per acre.....</b>	<b>253.00</b>	<b>246.53</b>	<b>250.52</b>

With 40-year bonds bearing 4.5 per cent interest, first payment of principal due at beginning of second year of operation the first annual tax per acre would be as follows:

## COST PER ACRE, \$250.

Principal, 2.5 per cent.....	\$6.25
Interest, 4.5 per cent.....	11.25
Operation and maintenance.....	2.50
<b>Maximum annual tax per acre.....</b>	<b>20.00</b>

## HYDROELECTRIC PLANT.

The outlet of the proposed Potrero-Cruces tunnel is at an elevation 1,610 feet above sea level. By building 8,600 feet of canal along the hillside and a pipe line 2,650 feet long an effective head of 915 feet can be obtained at the proposed power-house site on the Cruces River.

Storage reservoirs on the rivers to be diverted are not practicable, so that the daily output of the plant would be limited by the combined daily flow of these streams.

The mean monthly rate of flow during the past year varied from 7 second-feet in January to 36 second-feet in October, with a minimum of 5 second-feet for seven days in the month of February. The storage capacity of the tunnel and adjacent canal will be sufficient to regulate the daily flow during the dry season so that full use may be made of the minimum flow. For eight months of the year the flow is sufficient for the generation of a minimum of 1,000 horsepower, or 18,000 kilowatt hours daily, while the minimum daily flow for the seven driest days of the year would be sufficient to generate 1,000 horsepower for nine hours, or 6,714 kilowatt hours daily. The distance from the power-house site to various points in the vicinity are as follows: To San German, 7 miles; to Mayaguez, by way of San German, 19 miles; to the east end of the Guanica Lake, 11 miles; from San German to Lajas, 3 miles.

There is no question about there being a good market for cheap electric power in the district between Guanica and Mayaguez. As an example of what has been done in this line in the irrigation district the following figures from the operation reports of the Carite plant will be of interest:

Period: February and March, 1918—2 months.

Output at plant, 582,340 kilowatt hours.

Average daily output, 9,870 kilowatt hours.

Average hourly, 412 kilowatt hours.

Average peak load at night, 495 kilowatt hours.

Average peak load at day, 448 kilowatt hours.

Connected load, motors, 614.5 horsepower.

Connected load, lighting, 176 horsepower.

Total connected load, 790 horsepower.

Income for two months, \$12,990.30.

Income per kilowatt hour generated, 2.23 cents.

Additional load for which contracts are signed, 544 horsepower.

Estimated rate of income at end of year from present contracts, \$107,000 per annum.

If all the power that could be developed by the minimum river flow at the proposed plant near San German could be sold at the same average rate, that is, 2.23 cents per kilowatt hour at the switchboard, the annual income would be \$54,500. For eight months of the year there would be available a large excess capacity which could be sold to centrals or power companies at a rate much less than the cost of production by fuel plants.

The estimated cost of the proposed hydroelectric system with two 700 kilowatt units, is as follows:

Conduit.....	\$33,000
Penstock.....	37,000
Power house and machinery.....	70,000
Substations.....	12,000
Transmission lines.....	48,000
Engineering and contingencies.....	20,000
Interest during construction.....	30,000
<b>Total cost.....</b>	<b>250,000</b>

#### ANNUAL COST.

Payment of principal, 2.5 per cent.....	\$6,250
Interest at 4.5 per cent.....	11,250
Depreciation, 5 per cent.....	12,500
Operation and maintenance.....	12,000
<b>Total.....</b>	<b>42,000</b>

The plant could be completed and ready for operation at the same time as the rest of the project.

The income should be at least \$60,000 per year, based upon the rates for power as sold by the irrigation service, and the plant would not only pay for itself, but would furnish a surplus which could be applied to reduce the annual assessment on the irrigable lands.

#### ISABELA DISTRICT.

This project is to provide irrigation for a strip of land about 10 miles long and 4 miles wide, situated along the northwest coast of the island between the Guajataca River and the town of Aguadilla, utilizing water from the Guajataca River. The land consists of a high rolling plain, sloping from an elevation of 500 feet above sea level at the foot of the mountains, to about 275 feet above sea level at the steep bluff which follows the coast line around this part of the island.

About one-half of the entire area is under cultivation and the remainder is used for pasture. The soil in the higher sections is of a clayey nature, while a strip about 1 mile wide near the sea is composed of a black sandy loam, varying from 1 to 9 feet in

depth. The principal crops are cane, tobacco, corn, beans, onions, and sweet potatoes. The mean annual rainfall is about 54 inches, which is sufficient for the minor crops if fairly evenly distributed which sometimes happens, but often two and three crops in succession are lost on account of drought. The total rainfall for the eight months from December 1, 1916, to July 24, 1917, was 20.17 inches, an average of 2.52 inches per month, or less than one-half that required for the successful cultivation of sugar cane. There is no irrigation in this district at the present time, as there are no running streams and water is found only at a depth of several hundred feet.

*Irrigable lands.*—The irrigable lands of the district begin about 4 miles southeast of Isabela. From this point to Aguadilla there are about 25,000 acres under the proposed canal, of which 21,400 acres were surveyed and plotted with 10-foot contour intervals. The remainder consists of hills which are not suitable for irrigation.

The lands surveyed are divided approximately as follows:

	Acres.
Land between top of bluff and sea.....	1,590
Roads, railroads, and houses.....	620
Hills not suitable for irrigation.....	2,640
Land which is irrigable but of doubtful value for irrigation.....	1,500
<b>Total waste land.....</b>	<b>6,400</b>
<b>Good irrigable land.....</b>	<b>15,000</b>
<b>Total surveyed.....</b>	<b>21,400</b>

*Water supply.*—The Guajataca River rises in the mountains about 4 miles south of the town of Lares. A tributary, called the Cibao River, rises in the municipality of Camuy and joins the Guajataca about 4.5 miles northwest of Lares. From here the river flows in a northerly direction to the sea, forming the boundary between the municipalities of San Sebastian, Quebradillas, and Isabela. The point selected for a dam site is about halfway between Lares and the coast, at the lower end of a wide flat valley and about one-half mile above the head of the Guajataca canyon. The drainage area above this point is approximately 41 square miles.

On September 10, 1916, a gaging station was established on the river 1 mile above the dam site. The following table gives the monthly discharge since that date and the rainfall at Lares for the corresponding period:

*Flow of Guajataca River one mile above dam site.*

Month.	1916		1917		1918		Mean annual rainfall (inches).
	Rainfall (inches).	Flow in acre-feet.	Rainfall (inches).	Flow in acre-feet.	Rainfall (inches).	Flow in acre-feet.	
January.....			0.71	1,092	0.72	2,176	4.38
February.....			3.70	966	3.81	1,154	3.29
March.....			0.43	803	1.78	1,096	5.17
April.....			9.03	3,224	8.34	1,882	7.97
May.....			13.82	15,459	10.60	7,374	12.55
June.....			21.00	19,771	6.75	8,401	9.46
July.....			2.99	3,490			8.02
August.....			12.79	7,854			9.67
September.....	15.87	8,016	11.01	11,831			10.36
October.....	9.15	15,085	14.59	13,354			13.16
November.....	7.33	9,746	11.25	16,975			8.83
December.....	1.44	1,943	4.53	5,718			5.60
<b>Total.....</b>	<b>25.79</b>	<b>34,790</b>	<b>106.75</b>	<b>100,537</b>	<b>32.00</b>	<b>22,062</b>	<b>98.60</b>

<sup>1</sup> 21 days only.

As the above measurements do not include the run-off from about 4 square miles below the gaging station, and various floods were not reported, it is estimated that the mean annual river flow at the dam site will be approximately 100,000 acre-feet.

#### GENERAL FEATURES OF PROJECT.

*Reservoir.*—With a duty of water at the reservoir of 5 acre-feet per acre per annum, the irrigation of 15,000 acres will require 75,000 acre-feet per annum, or 6,500 acre-feet per month. The records of river flow show that for six months of the year the monthly discharge of the Guajataca River is less than this amount, and that approximately 18,000 acre-feet will be required to make up the deficiency from the beginning of December to the end of April. May is usually a very wet month, so that a reservoir

of this capacity would probably be sufficient for the needs of irrigation in an average year. The surplus flow after deducting evaporation losses is estimated at 22,000 acre-feet per annum, equivalent to a uniform flow of 30 second-feet. The main canal should have a capacity at least 33 per cent greater than that necessary for a uniform daily delivery to the irrigated lands, so that in this case the canal would be large enough to carry the average daily flow of the river, or 134 second-feet. The proposed power plant of the project, which is to be located at a drop in the main canal, has an effective head of 81 feet, and this excess flow will represent about 220 horsepower at the switchboard.

The storage capacity necessary to equalize the mean annual flow will be about 28,000 acre-feet, and the proposed reservoir has a capacity of 33,618 acre-feet, of which 28,070 acre-feet are above the canal level and an area of 903 at the spillway level. The land to be submerged lies between elevations 580 feet and 670 feet above sea level, and comprises parts of the municipalities of Quebradillas, San Sebastian, Camuy, and Lares. About 225 acres are in cane, 35 acres in coffee, 20 acres in minor crops, and the remainder is pasture and barren land. A small sugar factory called Central Soller will have to be moved a short distance to bring it above the reservoir level.

*Dam.*—The dam site is at the lower end of the Guajataca Valley at the boundary line between the municipalities of San Sebastian and Isabela. The hills on either side are of limestone formation overlaid with clay. The river for 3 miles above this point has a slope of 12 feet per mile, and for a distance of 3,000 feet downstream the slope is 13 feet per mile.

The limestone bluffs forming the walls of the Guajataca canyon begin about 2,000 feet below the dam site. Although there are various "sumideros" or sink holes in the valleys lying to the east of the Guajataca River, these are at elevations higher than the reservoir flow line, and there is nothing to indicate any faults or lines of weakness in the formation of the hills at or above the dam site. Test pits and borings on the line of the axis of the dam show from 7 to 40 feet of hard clay overlying the limestone.

Estimates of cost were made for dams of various heights and of two types, earth and reinforced concrete. Owing to the large amount of excavation required for a concrete dam and the present high prices for construction materials, the cost of the two types would be about the same, and if the foundation should prove suitable for an overflow type dam, the concrete structure would be preferable. If, however, the excavation of the spillway through the hill at one end of the dam is necessary, the earth dam will be the cheaper. Before the type of dam is definitely determined or construction authorized it would be advisable to have additional borings made, and have the site examined by a competent geologist.

The estimate given in this report is for an earth dam with a maximum height of 127 feet above the river bed, 932 feet long on top, with a crest width of 30 feet, lower slope 2 to 1, upper slopes 3 to 1 and 2 to 1, and a volume of 560,000 cubic meters. The temporary diversion tunnel will be 610 feet long. When the dam and spillway are completed the tunnel will be bulkheaded and the water delivered through an uptake to the canal, which will be at elevation 650, or 55 feet above the level of the river bed.

*Spillway.*—The spillway will be cut through the hill at the west end of the dam, with its floor 22 feet below the crest of the dam. A width of 250 feet will give a capacity of 41,000 second-feet, or 1,000 second-feet per square mile of drainage area, with the water in the reservoir 5 feet below the top of the dam, or 15 feet above the spillway level. The storage capacity of the reservoir for these 15 feet is about 16,000 acre-feet which should be sufficient for the control of the maximum flood that can be expected. A spillway of this width will require 360,000 cubic meters of excavation, of which at least two-thirds will be earth and hard pan and the remainder rock, all of which material can be used in the construction of the dam.

*Temporary power plant.*—By diverting water just below the dam site through a canal three miles long, a head of 121 feet can be utilized for the generation of power for use during construction. For about 8 months of the year 250 horsepower or more of continuous power could be delivered at the dam, and for the remainder of the time this amount would be available for at least 9 hours daily. This power would be used for the operation of derricks, pumps, rock-crushing plants, sand machines, lighting, compressors for the tunnels, etc. Assuming two years of operation the cost of the power delivered will be about \$90 per horsepower per year, which will be much cheaper than coal or oil.

*Transportation.*—The dam site is 6.28 miles from the town of Quebradillas, which is the nearest point on an insular highway. From the town to the barrio of San Antonio, a distance of 2.14 miles, there is a good dirt road which can be paved at a small cost. From this point to the dam site a distance of 4.14 miles, a first-class macadam road



with a maximum grade of 7 per cent can be built for \$50,000. The nearest port is Aguadilla, 18.75 miles from Quebradillas. If this port is used the most economical transportation will be by rail to the station of Quebradillas which is about 2 miles from the town, and thence by motor trucks to the dam. The excessive grade of the carretera near Aguadilla precludes the use of motor trucks for the entire distance.

There appears to be no reason however, why freight could not be discharged at Hatillo, which is but 8.75 miles from Quebradillas. There is deep water quite close to the shore and the bay is more protected than Arecibo. If this is done, freight would have to be handled but once and the total haul would be but 15 miles over good roads.

Transportation by rail could be secured by building a railroad about 4 miles long from the dam site to the terminus of the cane road of the Central Alianza in the barrio of San Antonio. This road is about 10 miles long and connects with the American Railroad in Camuy, about 1.25 miles from Hatillo. It is of 30-inch gauge, has about 5 per cent maximum grade and is operated by Shay locomotives. At present prices for steel rails and equipment, the construction and operation of this road would be more expensive than that of the proposed macadam road, with motor trucks or traction engines, and would be of little value to the community after construction is completed.

*Canal.*—The main distribution canal will be 18 miles long, including 10 tunnels aggregating 7,005 feet in length, the longest of which is 1,700 feet, and 9 siphons or flumes with a total length of 2,280 feet. About one-half of the total length of the canal will be through a mountainous section where the excavation will be largely in loose rock and lining will be necessary. The first 12 miles will have a capacity of 130 second-feet. The remainder of the canal will have a capacity of from 45 to 100 second-feet, will be through very easy ground, and lining will not be required.

*Laterals.*—The survey of property lines was not completed but it is estimated that there are 600 landowners and that the total length of laterals will be approximately 110 miles.

About one-third of the laterals will require lining, and approximately 30 per cent of the cost of the lateral system will be for siphons required to deliver water to about 1,500 acres, consisting of small areas situated above the general level of the surrounding country. As the water supply is estimated to be more than sufficient for the irrigation of all the land, the large expenditure for siphons will be justified, since the inclusion of these small areas will reduce the average cost per acre of the entire irrigation system. The smaller siphons can be made of cast iron or concrete pipe from 12 to 16 inches in diameter, and buried in the earth so as not to interfere with cultivation.

*Hydroelectric system.*—At a point on the canal line near where the irrigable lands begin, the ground falls away rather rapidly for some distance below the canal, and by making a drop of 81 feet, the remainder of the canal can be located in flat land, lining will not be required and the length will be about 2 miles less than the original line which followed along the hillside at the upper edge of the irrigable land. The cost, including the lateral to command the lands above the main canal, will be less than if the original location is followed. This drop can be used for the development of power and 600 horsepower generated with the water required for irrigation of the lands situated below the plant, which amount can be increased to 800 horsepower if the estimated average flow of the Guajataca River can be utilized. By providing a small earthen reservoir or enlarging the canal above the drop so as to secure a few acre-feet of storage, the above capacities can be increased for peak loads at the rate of about 87 horsepower hours per day per acre-foot of storage.

The estimated cost of a plant with two 600 kilowatt units complete, with transmission lines to Isabela and Aguadilla, and including interest during construction is \$118,000 or \$147.50 per horsepower for the average output capacity at the switchboard.

There are a few hundred acres of good cane land situated too high to be irrigated by gravity which can be furnished water by pumping from the canal. The principal market for power, however, would be in the neighboring towns and centrals. The site for the plant is 3.1 miles from Isabela and 11.9 miles from Aguadilla. These towns may be compared with Salinas and Guayama, where the present sales of power for lighting and industrial purposes within the urban zones amount to \$2,400 and \$8,400 per annum, respectively. Cheap electric power should prove an important factor in the development of the town and port of Aguadilla. There are three large centrals between Aguadilla and Mayaguez, a distance of 30 miles by the carretera, and as the tendency is toward the use of electric power in centrals there should be no difficulty in disposing of the entire output of the plant.

The additional cost of a transmission line to Mayaguez and for substations would be about \$50,000, making a total of \$168,000, and based upon this figure the annual cost including interest, sinking fund, depreciation, and operation would be about \$30,000.

The annual output at 2 cents per kilowatt hour at the switchboard would amount to \$105,120.

*Estimated cost of construction.*—The following estimates are believed to be liberal. The high unit costs are due principally to the cost of transportation and in part to the present high prices for cement, pipe, machinery, and fuel:

**Dam and reservoir:**

Excavation, stripping, 51,000 cubic meters, at 75 cents.....	\$38,200
Excavation, core trench, 4,530 cubic meters, at \$2.....	9,660
Concrete core wall, 5,400 cubic meters, at \$18.....	97,200
Embankment (305,000 cubic meters excavated from spillway), 590,000 cubic meters, at \$1.10.....	649,000
Tunnel and shaft excavation, 7,520 cubic meters, at \$10.....	75,200
Tunnel and shaft concrete, 1,520 cubic meters, at \$21.....	31,920
Tunnel open cut excavation, 16,000 cubic meters, at \$1.....	16,000
Gate house and gates.....	8,000
Paving upper slope and crest, 3,650 cubic meters, at \$3.....	26,950
Right of way and damages.....	143,000
Roads, including bridge over spillway and road to Quebradillas.....	80,000

	1,141,120
Engineering and contingencies.....	114,870

Total.....	1,256,000
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**Main canal:**

19,100 linear feet, at \$6.....	114,600
20,480 linear feet, at \$8.....	163,820
14,400 linear feet, at \$4.....	57,600
30,000 linear feet, at \$1.....	30,000
7,005 linear feet of tunnel (10 tunnels), at \$30.....	210,150
2,280 linear feet of concrete siphon or flume, at \$20.....	45,600
Telephone line.....	6,300
Ditch riders' houses.....	9,000
Right of way and damages.....	30,000

	667,170
Engineering and contingencies.....	66,830

Total.....	734,000
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**Lateral system for 15,000 acres:**

Excavation, 172,000 cubic meters, at 50 cents.....	86,000
Concrete lining, 4,460 cubic meters, at \$20.....	89,200
Concrete road crossings, 600 cubic meters, at \$20.....	12,000
Concrete siphon and flumes, 800 cubic meters, at \$22.....	17,600
Cast-iron pipe siphons, 45,000 feet, at \$3.....	135,000
Outlets and modules, 800 feet, at \$30.....	36,000
Right of way and damages.....	30,000

	405,800
Engineering and contingencies.....	40,200

Total.....	446,000
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**Hydroelectric system:**

Penstock, 700 5-foot riveted steel pipe, $\frac{1}{4}$ -inch, 170,000 pounds, at 8 cents.....	13,600
Concrete and excavation for saddles.....	2,400
Power-house building.....	6,000
Power-house equipment.....	36,000
Foundations for equipment.....	2,000
Installation of equipment.....	3,000
Miscellaneous tools and supplies.....	1,200
Operators' quarters.....	3,000
Transmission line to Isabela and Aguadilla.....	22,500
Transmission line, Aguadilla to Mayaguez.....	40,000
Substations.....	24,300

	153,000
Engineering and contingencies.....	15,000

Total.....	168,000
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*Irrigation commission:* The expenses of an irrigation commission to determine what lands should be included, are estimated at \$9,000.

*Interest during construction:* It is assumed that the work can be completed in three years and that interest for the first year of operation will be paid from the bond issue.

First year, interest on \$500,000, at 4.5 per cent.....	\$22,500
Second year, interest on \$1,500,000, at 4.5 per cent.....	67,500
Third year, interest on \$2,800,000, at 4.5 per cent.....	126,000
Fourth year, interest on \$3,000,000, at 4.5 per cent.....	135,000
Total.....	351,000

## SUMMARY.

Dam and reservoir.....	\$1,258,000
Main canal.....	734,000
Lateral system.....	446,000
Hydroelectric system.....	168,000
Irrigation commission.....	9,000
Interest during construction.....	351,000
Operation and maintenance, 1 year.....	36,000
Estimated cost of system.....	3,000,000
Estimated cost per acre.....	200

With bonds bearing 4.5 per cent interest, principal payable in 40 equal installements beginning five years after date of first issue, the expenditures for the first few years of operation and the tax per acre based upon the inclusion of 15,000 acres would be about as follows:

	First year.	Second year.	Third year.	Fourth year.
Principal.....	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
Interest.....	135,000.00	131,625.00	128,250.00	124,875.00
Operation and maintenance.....	36,000.00	40,000.00	40,000.00	40,000.00
Total.....	246,000.00	246,625.00	243,250.00	239,875.00
Income from sale of power.....	(1)	21,625.00	50,000.00	50,000.00
Assessment.....	(1)	225,000.00	193,250.00	189,875.00
Rate per acre.....		15.00	12.81	12.66

<sup>1</sup> None.

## CONCLUSIONS.

From the investigations made thus far there appears to be no doubt of the feasibility of the Lajas and Isabela projects. The engineering problem contains no difficult or unusual features. The financial aspects both from the standpoint of the individual landowner and of the government resolve themselves into the simple question of whether it will pay.

In the Lajas district irrigation has been practiced for many years wherever water is available for pumping, but the supply is limited and only a small portion of the irrigable land can be properly irrigated, while the cost per acre for pumping exceeds the estimated maximum assessment for a gravity system. With cheap electric power which can be developed in connection with the project, and with the increased water supply due to the construction of such a system, low-lift pumping plants will prove very economical, and the gravity supply can practically all be used on lands which at present are nonirrigated.

In the Isabela district there is no irrigation at present and no water supply other than that proposed in this project. The success of the crops depends entirely upon the amount and distribution of the rainfall. At least one-half of the irrigable land is uncultivated simply because the rainfall is not sufficient to insure a crop of sugar cane, and the amount of land that is planted in minor crops is limited to the acreage that can be cared for by the inhabitants of the district. There are a large number of small properties and these are usually planted in minor crops and cultivated by the owners, while the greater part of the uncultivated land pertains to larger tracts. The average crop of cane during the last few years has not exceeded 10 tons per acre. The soil is naturally fertile, has not been overworked, and in years of sufficient rainfall has produced good crops, and there is every reason to believe that the value of the land with irrigation will be at least doubled.

The soil is particularly adapted to the cultivation of fruit, vegetables, and tobacco, and a large proportion of the onions and sweet potatoes produced in the island come from this section. As a rule three crops a year are grown on the same tract of land, and when the rainfall is well distributed the average yield is about \$200 per acre. In some years two and three crops in succession are failures, and the net result is that the average farmer makes a bare living from land which would, if insured from drought, give returns per acre equal to or greater than any other land in Porto Rico.

## RECOMMENDATIONS.

It is realized that at the present time conditions are not favorable for an issue of bonds such as would be required for the construction of the proposed irrigation systems, but a considerable amount of preparatory work, such as the final location and cross-sectioning of main canals and roads, location of tunnels, and the preparation

of plans and specifications, will be necessary before contracts can be let or construction commenced.

Additional borings should be taken at the Guajataca Dam site in order that the type of dam best suited to the conditions may be determined, and, owing to the peculiar formation of some of the surrounding country, it would be advisable to secure the opinion of an expert geologist as to the probabilities of seepage losses from the proposed reservoir. Stream measurements should be continued, since records of river flow covering a period of several years are necessary in determining the amount of land that can successfully be irrigated in an average year.

It is therefore recommended that these projects be considered by the next legislature, and in case they meet with approval, that the sum of \$60,000 be appropriated for stream gauging, preliminary work, and the preparation of detailed plans and specifications, said amount to be repaid to the insular treasury when funds become available for the construction of these projects.

#### IRRIGATION SYSTEM.

The irrigation system, authorized by the public irrigation law and acts amendatory thereto, has been in operation for four years. The temporary district was formed on September 1, 1914, and the permanent district became operative July 1, 1917. The following is a brief explanation of the principal features of its management, operation, and maintenance for the fiscal year:

#### WATER SUPPLY.

The volume of rainfall and the river flow during what is usually considered the flood period was light, as compared with the average during similar periods for the past eight years. The reservoirs in the eastern division were not filled during the year, but in the western division the water in the Guayabal Reservoir reached the spillway during the latter part of October, and was maintained at or near the crest until the latter part of December. Some water in the Jacaguas River, which could not be controlled, was wasted to the sea.

The long-continued drought which prevailed from November to the end of the fiscal year was especially severe in the eastern division. Rains during the month of June caused a small increase in the stored water in the reservoirs, but not sufficient to permit full deliveries for the month.

To insure the most economical and beneficial use of the limited amount of water available, it became necessary during the dry season to reduce the rate of delivery of water to the included lands to less than the standard rate per acre.

On June 30 the supply of water in the reservoirs was very limited and what rainfall there was came in light showers which were not of much benefit for the cultivation of the cane fields. Although the limited rainfall has made it impossible to deliver the full 4 acre-feet of water per acre per year, the amount delivered has been sufficient to keep the cane on most of the areas in cultivation in fairly good condition.

In the drier sections of the irrigation district some of the planters supplement their supply of water furnished by this service with water from pumping plants, and the installation of these plants has probably saved some cane fields that otherwise would have suffered on account of shortage in the supply of water for irrigation. With the low rates for electric power these plants provide a cheap insurance against long drouths.

A comparative record of rainfall is given in Appendix No. I.

The flow of the principal streams that enter the various reservoirs for the years covered by the observations of this service is shown in Appendix No. II.

#### OPERATION.

The permanent irrigation district was formed on July 1, 1917. The area included in the temporary district was 23,619.4 acres. As a result of the studies of the operation of the temporary district the irrigation commission decided to increase the acreage for the permanent district to 26,752.50 acres, an increase of 3,133.10 acres. The area to which water was offered for delivery on July 1, 1918, and on subsequent dates is shown in Appendix No. III.

On July 1, 1917, there were 10 small lots in the eastern division and 11 lots in the western division that had been included in the permanent district but to which water was not offered for delivery. One lot was in litigation and has not yet been settled, and some of the lots were of small area and were located at points remote from the main canal line. The cost of constructing modules and laterals through which to deliver water to the lots was considered excessive in comparison with the

benefit to be derived, so appeals were taken from the valuations found. As the owners of some of these small lots agreed to pay a part of the cost of construction, modules and laterals were constructed later and the areas were included as of July 1, 1917, and part of the others were included at a later date.

The acreage selected by the irrigation commission for inclusion in the permanent irrigation district is shown in Appendix No. III.

Full deliveries were made in the eastern division from July to November, inclusive. For the remaining months of the fiscal year deliveries were reduced to correspond to the amount of water available. The deficit or difference between the amount of water at the rate of 4 acre-feet per acre and the amount actually available for deliveries in the included lands in the eastern division during the year amounted to 14,081.12 acre-feet, or about 0.86 acre-feet per acre.

In the western division full deliveries were made throughout the year, but on June 30 the available storage in both the Guayabal and the Coamo reservoirs was practically exhausted, making it impossible to continue deliveries at the full standard rate.

The amount of water actually delivered each month, including deliveries to concessions and the sale of water, and the amount offered but not used is shown in the Appendix No. IV.

The total for the year was 129,585 acre-feet, as compared with 145,600 acre-feet delivered during the previous fiscal year. These deliveries were distributed as follows:

	Acre-feet.
During the first quarter, July to September.....	35,215
During the second quarter, October to December.....	40,530
During the third quarter, January to March.....	27,785
During the fourth quarter, April to June.....	26,165
<b>Total.....</b>	<b>129,585</b>

#### SALES OF WATER.

In anticipation of the inclusion of new tracts of land in the permanent irrigation district 28 contracts for the sale of class 1 water were prepared for the delivery of water to the new areas. These contracts all expired upon the date of the formation of the permanent irrigation district. Since that time water has been delivered regularly at a uniform percentage of the required 4 acre-feet per year. Since June 30, 1917, four contracts have been signed for the delivery of water for domestic purposes and six new contracts have been made for the use of filtration water. Two new contracts providing for the sale of water between water users have been approved.

The sale of surplus and filtration water during the year is shown in the following table:

	Acre-feet.	Value.
First quarter.....	1,611.06	\$4,281.43
Second quarter.....	5,013.78	14,290.31
Third quarter.....	564.70	765.35
Fourth quarter.....	337.25	724.67
<b>Total.....</b>	<b>7,526.79</b>	<b>20,061.76</b>

The larger part of the sales were made in the western division during the rainy season.

#### MAINTENANCE.

The maintenance of irrigation structures is a matter of much importance. Careful inspection is required to discover any weak places that may have developed. A small leak in a reservoir, canal, or flume may, in a few hours, assume proportions that will result in the extensive destruction of property, and therefore constant vigilance and prompt action must be taken to prevent accidents. Caretakers and watchmen are on guard at all the reservoirs during night and day, and 17 ditch riders are assigned to the various sections of the main canals and laterals. Each one is required to patrol his sections twice each day, to make the changes desired in the delivery of water, and to report on the condition of all structures.

*Cleaning canals.*—As the delivery of water is nearly a continuous operation throughout the year the full capacity of canals and laterals can not be utilized unless they are clean and free from obstructions. The growth of vegetation on the banks of the

canals, especially at and near the water line, as well as the growth of moss in the bottom of the canals, is very rapid. As the vegetation extends into the canal the velocity of the water is reduced, and this reduction in velocity also reduces the capacity of the flowing water to carry in suspension silt and other fine material, which is then deposited in the grass at the side and in the moss in the bottom of the canal, thus greatly reducing the capacity of the canal, and consequently the expense of this part of maintenance is excessive.

*New structures.*—Since July 1, 1917, several new laterals for the delivery of water to new lands included in the permanent district were constructed, and as some sections of the laterals were located in porous soil they were lined with concrete. The principal work was the extension of lateral No. 895, which takes water from the main Juana Diaz Canal. One branch which is 2,664 feet long, cost \$2,049.91, the canal linings and all modules, siphons, and bridges being constructed of concrete. The other branch, which is 2,520 feet long, cost \$868.15, only part of the canal being lined.

To irrigate the new included areas several concrete modules were constructed, through which to measure the water to these lands. A few modules were also constructed at the expense of the water users, to enable them to take water from the main canals at other points where they considered that the water would be of much additional benefit to them.

Two hundred and thirty-four feet of reinforced concrete lining were placed in sections of the main Patillas Canal, where the banks of the canal were badly eroded. During the time that water was shut out of the canal it was cleaned of silt deposits and other obstructions. Much work has been necessary in the repairs of flumes and other structures.

The rebuilding of the Felicita flume was begun March 21, and the work continued through April, May, and June. By June 27 the seven concrete towers required to support the flume structure were completed. The water was cut out of the canal on June 28, and during the following two weeks the entire structure was completed and the flume sheets, which were in bad condition, were replaced by new galvanized-iron sheets of larger size which will increase the capacity of the canal.

A concrete diversion dam was constructed in the Guayabal spillway channel to prevent damage to the Juana Diaz Canal during times of floods.

## HYDROELECTRIC SYSTEM.

### CONSTRUCTION.

On June 30, 1917, the transmission system for the Carite power plant consisted of 27 miles of the main 20,000 volt-lines, 33.8 miles of the main 4,000 volt-lines, and 28.9 miles of branch lines, making a total of 39.7 miles. During the present fiscal year 7.3 miles of 4,000 volt-branch lines were constructed, making a total of 97 miles of transmission lines constructed to date. Several additional miles of branch lines will be required before the distribution system is completed.

Construction was delayed considerably by lack of material, caused by the unsettled shipping conditions. Transformers and supplies ordered many months ago have not yet been received.

The principal construction work was the extension of branch lines, installation of transformers, lightning arresters, and meters, and making changes that were necessary in order to supply the increasing demand for electrical power.

### MAINTENANCE.

To accommodate the operators at the power plant the construction of two houses was begun during the last quarter of the preceding year. During the early part of this year the houses were completed and were equipped with electric lights, water supply, and sanitary installations. Several changes were made at the plant. The narrow-gauge track used during construction was taken up and sold. The penstock was repaired and, unless some accident occurs, ought not to require any special attention for two years. Slides of earth and rock into the canal and along the new road, caused by heavy rainfall, were removed. For greater convenience in handling supplies the storerooms were improved, and the stable, which was in bad condition, was rebuilt.

### OPERATION.

With the exception of a few interruptions of short duration the operation of the plant and the delivery of electrical power has been continuous. The longest delay was occasioned by a tree falling on the transmission wires, causing a ground. Santa Isabel substation was without power for about six hours while the tree was being

removed. On account of a broken bolt in the pipe line at the plant the electrical current was cut off about five hours while repairs were being made. A few transformers have been burned out, caused either by excess load or possibly by atmospheric conditions.

On June 14 the available stored water in the Carite Reservoir was nearly exhausted, but fortunately rains came that night, making a substantial increase in the water in the reservoir, so that no reduction in the delivery of electrical power became necessary.

On June 30, 1917, the total number of contracts for electric power was 41, representing 789 horsepower. During the year 30 new contracts were signed for 545 horsepower; making an aggregate of 1,334 horsepower contracted for to date, divided as follows:

	Base A, flat rate, continuous power.		Base B, combination-rate power.		Base C, private lighting.		Municipal lighting.	
	Contracts.	Horsepower.	Contracts.	Horsepower.	Contracts.	Horsepower.	Contracts.	Horsepower.
June 30, 1917.....	27	532.5	6	56.5	6	10	2	190
During year.....	7	205.0	18	277.0	3	2	2	61
June 30, 1918.....	34	737.5	24	333.5	9	12	4	251

The amount of power generated each month, the amount delivered at substations and the monthly income from the sale of power is shown in Appendix No. V. The monthly output increased from 172,825 kilowatt-hours in June, 1917, to 334,360 kilowatt-hours in June, 1918, an increase of 93 per cent. The total output for the year was 3,290,315 kilowatt-hours, as compared to 961,125 kilowatt-hours for the previous fiscal year, an increase of 242 per cent. The total income for the year from the sale of power was \$71,792.71, and when all the installations contracted for are in operation the income will be about \$107,000 per annum.

The organization and personnel of the operating force are shown in Appendices Nos. VI and VII.

#### LEGAL DIVISION.

During the year titles have been perfected and contracts executed for the purchase of land necessary for the irrigation service, comprising an area of 37,568 acres, representing in value the sum of \$2,240.90. Deeds made by the right of way attorney and examined and approved by the department of justice of Porto Rico, ready for the signature of the parties interested, comprise an area of 18,253 acres, representing in value the sum of \$1,356.58. Condemnation suits for parcels of land required for the irrigation service instituted before the district courts of Ponce and Guayama and pending trial comprise an area of 38,280 acres, representing in values deposited with the secretaries of said district courts the sum of \$2,327.44.

The right of way attorney in charge of the legal division of the irrigation service has his office in San Juan. In addition to the work of perfecting titles, preparation and execution of deeds, and condemnation proceedings in connection with the work of the irrigation service, he has the work of perfecting titles, preparing and executing deeds and condemnation proceedings in relation with the acquisition of land for the different insular roads under construction by the department of the interior, and also the execution of deeds and sales of public lands belonging to the people of Porto Rico.

#### MAIN OFFICE.

During the fiscal year the division of property and accounts handled:

Four hundred and ninety-seven debit vouchers, amounting to \$540,346.77.

Eight hundred and sixty-four credit vouchers, amounting to \$106,976.30.

Three hundred and nine journal vouchers, amounting to \$6,565,210.06.

One hundred and five requisitions and 43 service orders.

The chief clerk, as paymaster, disbursed on laborers' pay rolls and minor payments \$47,997.68 during the fiscal year.

Sales of equipment no longer required by this service amounted to \$11,105.67 during the year. The total sales since construction was completed amount to \$84,770.76.

A financial statement is given in Appendices Nos. VIII, IX, and X. The total expenditures for construction amount to \$4,205,738.17. Operation and maintenance have cost \$410,064.36 to date, \$115,980.22 of which was expended during the fiscal year.

The total amount of bonds outstanding as of June 30, 1918, was \$4,950,000.

## INVESTIGATIONS AND IMPROVEMENTS.

On November 22, 1917, an act was approved authorizing an issue of bonds in the sum of \$200,000, \$100,000 to be used for the extension and improvement of Patillas Reservoir and \$100,000 for the construction and equipment of an auxiliary electric plant. Bids have been received on some of the equipment necessary for the auxiliary plant, but no action can be taken until the bonds can be sold and the money becomes available.

The capacity of Patillas Reservoir is to be increased by increasing the height of the dam and spillway. The work of raising the dam was commenced in December, 1917, and was completed in May, 1918, at an expense of \$687.36. Surveys have been made to relocate the roads on either side of the lake at a higher elevation so as to place them above the new flow line, and considerable work has been done also in determining the areas required for the right of way for the road and the additional area that will be required for the reservoir. The work of raising the spillway can not be undertaken until funds are made available by the sale of the bonds authorized for this purpose. The proposed development will increase the storage capacity of the reservoir about 3,000 acre-feet.

Some preliminary investigations have been made to find other streams which can be diverted into the Patillas and Carite Reservoirs. Studies are being made to determine whether the small amount of water found in the mountains above the Patillas and Carite Reservoirs will warrant the expense of tunnels and other structures that will be required to conduct the water into the reservoirs.

The long-continued drought that prevailed, especially in the eastern division of the irrigation district, since the month of November, 1917, emphasizes the necessity for the proposed enlargement of Patillas Reservoir, securing, if possible, an increased water supply from nonutilized streams above the Patillas and Carite Reservoirs, and the construction of the auxiliary power plant so that full use may be made of the present supply of water for the generation of electric power.



APPENDIX No. 1.—*Tabulation showing the rainfall by months for the fiscal year ending June 30, 1918, and the monthly normals for the period covered by the irrigation service records, showing also totals for the fiscal year ending June 30, 1917.*

[Rainfall in inches.]

Month.	Patillas.		Guayama.		Carite.		Jajome.		Guayabal.		Toro Negro.	
	Month.	Normal.	Month.	Normal.	Month.	Normal.	Month.	Normal.	Month.	Normal.	Month.	Normal.
1917.												
July.....	7.85	6.54	5.45	4.98	8.85	8.61	11.35	6.36	2.90	3.63	4.36	7.97
August.....	7.00	6.77	6.87	4.98	7.89	7.47	12.90	6.12	4.80	6.26	9.03	7.87
September.....	5.90	5.98	5.49	6.21	7.01	7.57	.....	.....	10.17	6.45	13.80	12.47
October.....	7.17	9.90	8.40	8.40	8.46	11.04	.....	8.63	4.54	11.94	13.75	17.71
November.....	8.83	8.06	2.38	6.23	4.39	8.71	3.63	8.15	3.88	5.21	13.91	10.63
December.....	1.82	3.84	1.46	2.45	3.16	4.71	4.01	3.76	2.26	2.08	3.96	5.07
1918.												
January.....	1.12	3.48	.54	2.17	2.12	4.49	2.24	3.41	.57	1.27	1.45	3.11
February.....	2.67	2.81	1.75	1.91	4.21	4.59	4.41	3.74	2.61	2.68	3.73	3.88
March.....	1.53	2.84	.76	1.87	3.26	5.08	3.93	3.83	2.89	2.35	4.57	4.00
April.....	2.23	2.62	2.49	2.09	3.45	4.13	4.07	4.58	5.53	3.77	5.94	9.36
May.....	2.24	4.10	1.06	3.92	8.89	5.90	3.03	5.67	6.95	6.52	6.94	8.45
June.....	7.31	6.93	3.91	5.63	7.40	8.08	6.91	9.02	2.52	3.59	3.76	6.39
Total, 1917-18.....	50.62	63.87	37.67	50.98	59.09	80.38	59.89	63.17	49.02	53.65	86.01	96.91
Total, 1916-17.....	80.79	66.05	66.45	52.98	101.91	83.90	101.24	70.56	62.40	54.37	120.23	98.82

The number of years on which the normals are based is shown as follows:

Patillas, from July 1 to April 30, 7 years; from May 1 to June 30, 8 years.

Guayama, from July 1 to November 30, 7 years; from December 1 to June 30, 8 years.

Carite, from July 1 to May 31, 7 years; from June 1 to June 30, 8 years.

Jajome, from July 1 to July 31, 4 years; from August 1 to June 30, 5 years.

Guayabal, from July 1 to May 31, 7 years; from June 1 to June 30, 8 years.

Toro Negro, from July 1 to May 31, 7 years; from June 1 to June 30, 8 years.

APPENDIX No. 2-A.—*Tabulation showing run-off in acre-feet of the streams entering Patillas Reservoir.*

Fiscal year.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	Febru-ary.	March.	April.	May.	June.	Year.
1907-8.....	6,707	7,472	15,555	4,245	2,350	3,705	3,690	5,511	4,512	2,129	3,533	4,240	24,077
1908-9.....	7,329	22,186	12,354	12,216	4,687	4,804	10,222	4,440	2,455	1,810	14,330	11,179	96,077
1909-10.....	3,044	9,212	6,986	11,778	21,215	3,524	2,478	1,732	3,105	1,477	2,064	2,862	91,840
1910-11.....	5,425	6,398	6,466	6,986	3,447	3,524	2,698	5,082	1,426	1,720	9,460	6,169	63,942
1911-12.....	2,789	2,645	4,396	8,020	6,743	10,200	7,467	3,708	5,079	3,833	2,472	7,047	70,225
1912-13.....	9,507	7,022	9,189	21,307	14,555	4,196	6,664	3,904	8,484	5,335	7,047	9,601	91,084
1913-14.....	5,065	4,968	4,097	6,925	6,261	2,607	2,068	6,958	2,700	3,475	8,457	8,249	73,463
1914-15.....	8,034	4,831	5,488	2,812	12,331	6,057	4,796	3,503	2,027	2,344	1,539	12,582	81,222
1915-16.....	13,470	14,608	8,483	21,213	26,883	3,650	1,681	1,192	989	886	1,813	3,835	100,631
1916-17.....	5,459	5,709	6,374	4,095	3,521	4,690	1,755	1,042	1,099	1,119	1,874	6,386	43,680
Total.....	66,780	84,352	83,668	103,243	106,314	49,327	45,299	38,902	32,842	25,029	54,632	74,532	730,815
Average.....	6,678	8,435	8,367	9,386	9,605	4,484	4,115	3,837	3,886	2,275	4,967	6,776	73,082

APPENDIX No. 2-B.—*Tabulation showing run-off in acre-feet of the streams entering Carite Reservoir.*

Fiscal year.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Year.
1907-8.....	2,080	1,967	4,196	1,730	937	1,399	1,938	2,390	1,801	910	1,302	1,359	13,716
1908-9.....	2,626	13,430	4,184	3,614	1,252	1,676	1,537	2,373	1,121	1,227	9,739	4,232	84,234
1909-10.....	2,935	3,660	7,489	3,853	4,523	1,286	1,214	2,913	1,239	1,600	6,539	1,007	36,401
1910-11.....	2,069	1,886	2,406	2,401	1,368	1,969	2,190	2,451	1,953	1,237	6,914	2,966	32,458
1911-12.....	3,950	2,766	1,235	3,845	1,811	4,385	2,771	1,133	1,179	941	2,885	1,158	24,018
1912-13.....	1,754	2,766	2,261	4,038	2,438	1,351	2,170	1,736	2,661	1,923	2,882	2,094	27,949
1913-14.....	1,752	1,492	1,094	2,438	2,438	1,235	1,235	1,003	2,011	1,002	2,002	2,094	25,356
1914-15.....	1,727	1,412	1,064	2,438	2,438	1,235	1,235	1,003	2,011	1,002	2,002	2,094	25,356
1915-16.....	5,377	4,783	2,782	1,064	11,136	1,170	1,818	478	613	387	410	1,160	17,687
1916-17.....	1,770	1,477	1,832	1,074	936	1,513	755	594	494	327	486	1,328	12,569
Total.....	22,470	33,516	30,751	33,927	31,443	19,107	14,798	16,250	12,986	10,601	26,248	23,609	261,902
Average.....	2,247	3,352	3,075	3,064	2,863	1,737	1,845	1,477	1,173	984	2,366	2,146	26,190

APPENDIX No. 2-C.—*Tabulation showing run-off in acre-feet of the streams entering Coamo Reservoir.*

Fiscal year.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Year.
1907-8.....	631	560	890	1,404	1,222	1,131	534	664	965	463	1,510	860	7,349
1908-9.....	538	16,751	9,370	1,431	2,537	4,311	2,545	414	460	2,833	18,868	720	26,025
1909-10.....	408	6,424	7,622	2,026	24,774	4,788	2,545	1,081	1,610	1,042	1,626	542	70,621
1910-11.....	522	358	4,269	9,143	2,763	4,788	1,303	1,031	1,730	848	2,158	883	26,904
1911-12.....	411	358	2,284	21,940	4,269	11,335	3,033	1,643	1,025	1,522	545	363	34,214
1912-13.....	534	387	2,284	21,940	21,175	6,090	2,613	1,570	1,206	1,024	1,461	586	70,756
1913-14.....	404	1,436	3,223	3,223	2,175	6,581	3,775	654	2,421	1,691	2,843	2,038	17,192
1914-15.....	802	552	504	1,954	6,064	1,280	756	574	371	497	246	148	14,601
1915-16.....	353	653	1,560	1,213	52	280	293	308	371	348	819	1,571	7,088
1916-17.....	1,892	10,283	7,394	24,952	11,133	3,171	2,327	309	691	925	941	1,194	66,587
1917-18.....	616	655	898	573	1,399	3,743	2,294	809	273	580	596	578	7,429
Total.....	6,706	36,037	32,184	72,868	94,466	34,709	14,827	9,052	10,142	11,778	30,943	9,813	336,106
Average.....	671	3,604	3,218	7,287	8,691	3,155	1,348	823	922	1,071	2,804	962	33,611

APPENDIX No. 2-D.—*Tabulation showing run-off in acre-feet of the streams entering Guayabal Reservoir.*

Fiscal year.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Year.
1908-9.....	2,226	19,584	12,023	9,246	5,939	3,537	2,378	2,316	1,873	3,599	8,139	2,990	36,892
1909-10.....	2,787	8,898	11,153	11,997	26,238	5,924	3,753	1,613	4,038	6,940	7,234	2,962	106,531
1910-11.....	2,741	2,310	3,640	10,568	10,943	6,961	2,910	2,351	2,401	2,675	2,677	2,961	72,435
1911-12.....	2,843	6,376	9,286	31,289	11,722	15,012	3,389	2,069	3,715	3,763	4,530	1,455	123,108
1912-13.....	1,704	2,043	3,983	48,496	36,190	5,734	2,377	1,818	3,492	3,220	6,544	2,580	126,563
1913-14.....	1,460	1,740	2,796	8,796	3,643	7,579	2,312	1,406	2,102	2,315	6,154	4,519	42,112
1914-15.....	1,460	7,021	12,206	12,206	21,672	7,579	2,312	1,406	1,100	2,315	1,760	4,519	66,595
1915-16.....	18,574	14,672	12,338	36,631	11,595	2,318	1,849	1,270	1,882	5,033	6,544	6,544	115,347
1916-17.....	1,867	2,076	6,031	10,569	6,923	5,448	2,037	1,941	802	2,558	3,210	1,888	40,851
Total.....	36,621	64,205	73,223	196,362	152,007	56,617	24,791	22,654	21,564	35,798	49,333	37,225	780,478
Average.....	4,069	7,134	8,136	19,636	15,201	5,662	2,476	2,265	2,156	3,580	4,933	3,723	81,164

APPENDIX No. 3.—*Acreage selected by the irrigation commission for inclusion in the permanent irrigation district.*

	Patillas.	East Guamani.	West Guamani.	Total eastern division.	Juana Diaz.	Total in district.
Total area selected.....	11,966.10	412.60	3,936.30	16,314.40	10,438.10	26,752.50
Acreage for which water was not offered for delivery as of July 1, 1917.....	93.00	6.00	1.00	100.00	80.80	180.80
Acreage to which water was offered for delivery as of July 1, 1917.....	11,873.10	406.10	3,935.30	16,214.40	10,357.30	26,571.70
Additional acreage to which water has been offered since July, 1917.....	5.00	.....	1.00	47.00	49.60	96.60
Total acreage to which water was offered July 1, 1918.....	11,878.10	406.10	3,977.30	16,261.40	10,406.90	26,668.30
Total acreage to which water has not been offered.....	88.00	6.00	1.00	95.00	31.20	126.20

<sup>1</sup> The 42 acres of land, lot No. 81, were included and received water during the existence of the temporary district, but were excluded by the irrigation commission from inclusion in the permanent district. Later, by order of the court, this area was included in the permanent district.

APPENDIX 4.—*Table showing the amount of water actually delivered each month and the amount offered but not accepted.*

## EASTERN DIVISION.

Month.	Actually delivered.	Offered but not accepted.
1917.		
July.....	5,453.58	267.04
August.....	6,274.02	88.75
September.....	4,672.90	1,477.17
October.....	6,448.07	38.48
November.....	5,998.13	142.22
December.....	4,581.23	26.41
1918.		
January.....	4,076.11	4.21
February.....	3,837.24	26.65
March.....	3,896.00	3.38
April.....	3,885.18	13.59
May.....	3,583.33	6.76
June.....	3,092.17	92.55
Total.....	55,797.96	2,219.21

## WESTERN DIVISION.

1917.		
July.....	6,464.99	35.41
August.....	5,094.83	24.80
September.....	5,011.46	329.77
October.....	7,561.98	46.09
November.....	8,788.97	30.87
December.....	6,789.42	75.84
1918.		
January.....	5,341.03	62.83
February.....	5,216.77	29.08
March.....	5,168.97	2.53
April.....	4,941.74	25.39
May.....	5,184.49	7.00
June.....	5,274.15	60.06
Total, western division.....	70,838.80	729.66
Total, eastern division.....	55,797.96	2,219.21
Total, eastern and western divisions.....	126,636.76	2,948.87

APPENDIX 5.—*Carite water power.*

Month.	Power generated, kilowatt hours.	Power delivered at substations.	Income from sale of power.
1917.			
July.....	214,000	195,086	\$4,492.30
August.....	238,000	210,608	3,899.17
September.....	216,585	200,147	5,130.54
October.....	254,245	235,549	5,443.55
November.....	267,470	241,359	6,003.08
December.....	261,280	229,020	5,988.50
1918.			
January.....	263,410	253,482	6,055.85
February.....	270,015	252,917	6,498.13
March.....	306,325	264,493	6,492.26
April.....	327,165	303,962	6,868.86
May.....	311,460	289,068	6,923.79
June.....	334,360	308,583	6,996.68
Total.....	3,290,315	3,001,274	71,792.71

APPENDIX 6.—*Porto Rico irrigation service—Recapitulation of service record of employees—From July 1, 1917, to June 30, 1918.*

Feature.	Number of employees July 1, 1917.	Changes during year.		Number of employees June 30, 1918.	Leave granted during year.		
		Appoint-ments.	Separa-tions.		With pay.	Without pay.	Total.
Carite water power.....	14	2	3	13	9	312	321
General administration.....	11	3	3	11	168	64	174½
Irrigation commission.....	3		3		62		62
Operation:							
Eastern division.....	18	2	4	16	210	298	508
Western division.....	8	2	3	7	42	34	76
Maintenance:							
Construction division.....	2			2	49		49
Total.....	56	9	16	49	540	650½	1,190½

APPENDIX No. 7.—*Employees of the Porto Rico irrigation service as of June 30, 1918.*

	General head-quarters.	Legal division.	Maintenance repairs.	Carite water power.	Hydro-graphic division operation.	Total.
Chief engineer.....	1					1
Assistant chief engineer.....	1					1
Chief of division.....		1			1	2
Electrical superintendent.....				1		1
Assistant engineer.....					1	1
Watermaster.....					1	1
Chief clerk.....	1					1
Stream gaugers.....					1	1
Observers.....					3	3
Zanjeros.....					13	13
Gate tenders.....					4	4
Bookkeepers.....	1					1
Clerks.....	2	1		1	6	9
Telephone operator.....	1					1
Mechanic.....				1		1
Operators.....				5		5
Foremen.....			2	1		3
Oilers.....				4		4
Janitors.....	1				1	2
Carpenters.....			10	1		11
Capataces.....			3			3
Blacksmith.....			4			4
Watchmen.....	1			3	12	16

APPENDIX No. 7.—*Employees of the Porto Rico irrigation service as of June 30, 1918—*  
Continued.

	General head- quarters.	Legal division.	Mainte- nance repairs.	Carite water power.	Hydro- graphic division operation.	Total.
Laborers.....	2		176	19		197
Linemen.....	1			10		11
Teamsters.....				1		1
Chauffeurs.....	1					1
Corral boys.....	1					1
Corral assistants.....	6					6
Messenger.....				1		1
Cook.....				1		1
Water boy.....				1		1
Patrolmen.....				2		2
Total.....	20	2	195	52	42	311

Appendix No. VIII, financial statement June 30, 1918 (see Exhibit No. 35, consolidated financial statement).

Appendix No. IX, statement of net charges to features during fiscal year ended June 30, 1918 (see Exhibit No. 36, consolidated financial statements).

Appendix No. X, general balance sheet and summary of accounts to June 30, 1918 (see Exhibit No. 37, consolidated financial statements).

## DIVISION OF DISBURSEMENTS AND ACCOUNTS.

During the past fiscal year there were prepared and passed for payment vouchers pertaining to 105 main accounts, with 47 subsidiary accounts, as follows:

Vouchers.	Amount.	Class.
219	\$457,317.50	On account of contracts.
5,673	703,723.45	Office salaries and expenses and for materials and supplies and services pertaining to work executed by administration.
5,892	1,161,041.04	

The special disbursing officer paid in cash to laborers throughout the island \$253,666.04, represented by 49,321 cash payments on 4,627 pay rolls, as below indicated:

Maintenance and repair of public roads and bridges.....	\$196,102.37
Survey and construction of insular roads.....	24,289.71
Surveys of irrigation projects.....	2,066.98
Surveys of public lands.....	626.64
Reconstruction and repairs to public buildings.....	22,679.73
Reconstruction and repairs of insular telegraphic lines.....	2,038.64
Miscellaneous.....	1,841.97
	253,666.04

## RÉSUMÉ.

Disbursed by vouchers.....	1,161,041.04
Disbursed by laborers' pay rolls.....	253,666.04
Total.....	1,414,707.08

Two thousand and thirty-two requisitions for purchase of materials and supplies were issued on the bureau of supplies, printing, and transportation. There were also issued to various parties for materials, supplies, and services, 1,167 direct purchase orders.

Owing to more ample appropriations having been secured for the maintenance of public roads and bridges and for care and preservation of public buildings, also to funds having become available from sale of insular bonds for road construction, the expenditures exceeded those of the previous year by the amount of \$401,801.89, as shown below:

Fiscal year.	Vouchers.	Amount.	Laborers' pay rolls.	Amount.	Total.
1916-17.....	5,204	\$766,101.99	\$5,529	\$246,803.20	\$1,012,905.19
1917-18.....	5,892	1,161,041.04	4,627	253,666.04	1,414,707.08
Exceeding previous year.....	688	394,939.05	902	6,862.84	401,801.89

## CHANGES IN PERSONNEL.

One hundred and forty-two permanent appointments and 259 temporary appointments were made in the past fiscal year; 294 employees were separated, 12 transferred to this department, and 6 transferred to other departments, 18 were reinstated, 158 were promoted, and 3 reduced.

## MOTOR VEHICLES.

During the fiscal year 1917-18 there was a large increase in the number of motor vehicles registered, as compared with the previous fiscal year, showing an increase in fees of \$11,187.36.

The new system of classification showing operators, chauffeurs, heavy motor-vehicle drivers, and motorcycle operators, is now in operation and has proved to be a success.

In cases of accidents the responsibility of all motor-vehicle drivers implicated therein has been carefully investigated, and when found at fault, their licenses have been temporarily suspended for periods ranging from 15 days to 6 months, or they were warned to be more careful in future, depending on the seriousness of the accident and the previous record of the driver.

Infringements of road laws and municipal ordinances wherein the courts have imposed fines, have generally been punished by suspensions of licenses for periods ranging from 15 days to 2 months, according to the nature of the offense and the previous record of the driver. Notwithstanding these punishments there have been many accidents and infringements of the road laws and municipal ordinances, it being estimated that the total fines imposed by the insular courts on motor-vehicle drivers during the fiscal year amounted to between \$15,000 and \$20,000.

Valuable cooperation has been received from the public generally toward placing the responsibility for motor-vehicle accidents which have occurred, and in counseling drivers to use the greatest care, and it is desired that they continue to give their moral support, in order to safeguard life and property on the public highways of Porto Rico.

The records of this office are so kept that by giving the name or number of any licensed motor vehicle or driver the individual record of same can be easily located and all data received pertaining to these records are filed therewith for future reference.

The regular work of this office is performed by the automobile clerk and two assistants, but at the close of the old year and commencement of the new several additional temporary employees are required for a period of from 60 to 90 days.

Below is a table showing transactions and earnings during the fiscal year just closed:

	Number.	Amount.
Automobile and truck licenses.....	4,529	\$78,488.82
Motorcycle licenses.....	210	736.81
Automobile licenses (nonresident).....	4	20.00
Dealers' licenses.....	20	800.00
Duplicate licenses (automobiles).....	90	90.00
Transfers of automobiles and trucks.....	1,400	1,400.00
Transfers of motorcycles.....	32	32.00
New tags issued in lieu of lost tags, automobiles..... pairs.....	88	88.00
New tags, issued in lieu of lost tags, motorcycles..... do.....	8	4.00
Applications for examination as motor-vehicle driver.....	1,754	1,754.00
Licenses to drive motor vehicles, chauffeurs, at \$4.....	360	1,400.00
Licenses to drive motor vehicles, operators, at \$5.....	550	2,750.00
Heavy motor vehicle drivers' licenses, at \$1.....	600	600.00
Licenses to drive motorcycles, at \$5.....	50	250.00
Learners' permits, at \$1.....	1,244	1,244.00
Certificate of motor-vehicle records, at \$1.50.....	8	12.00
Total.....		89,669.43

## RÉSUMÉ.

## MOTOR VEHICLES IN OPERATION JUNE 30, 1918.

Automobiles, private.....	3,422
Automobiles, public.....	842
Automobiles, municipal.....	60
Trucks, private.....	80
Trucks, public.....	125
Motorcycles.....	210
Total.....	4,739

## FRANCHISES, PRIVILEGES, AND CONCESSIONS.

The new organic act provided for a public service commission, and the legislature passed an act approved December 6, 1917, defining the duties of this commission and the rules and regulations for its procedure.

The commissioner of the interior, by virtue of his office, is a member of this commission, and at present is chairman of the committee on rates.

As the commission has no technical personnel, many applications for franchises and concessions and other matters requiring investigations of a technical nature, have been referred to the commissioner of the interior, who, through the engineering force of the department, investigates and reports upon the physical engineering and economic features of such applications.

## PERSONNEL.

Under provisions contained in the new organic act approved March 2, 1917, to the effect that all head of departments temporarily appointed by the governor upon the approval of the act, should cease in their functions not later than 20 days after the convening of the legislature, the tenure of office of my predecessor, Mr. Manuel V. Domenech, terminated on September 2, 1917. The direction of the department then devolved upon his assistant, Mr. Edmund Enright, who discharged his duties as acting commissioner of the interior until the writer, who has occupied the position of superintendent of public works in Mr. Domenech's administration, was appointed commissioner of the interior on February 19, 1918.

Mr. Domenech holds the honor of having been the first Porto Rican to fill the position of commissioner of the interior, to which he was appointed by President Wilson in September, 1914. A word of acknowledgment is due Mr. Domenech for his splendid work during his three years of office, his achievements having demonstrated his eminent qualities and his great intellectual ability. His endeavors and accomplishments as a public officer were most excellent, and he has left imperishable traces of his personality in the life of this department.

He had an excellent collaborator in Mr. Edmund Enright, assistant commissioner, whose services were lost to the department when he resigned his position, in June, 1918.

Other important changes and promotions were made in the personnel of this department during the year, as follows:

Mr. Ricardo Skerrett was promoted from assistant superintendent of public works to superintendent of public works February 20, 1918.

Mr. A. Lucchetti Otero was promoted from the position of maintenance engineer to that of assistant superintendent of public works on March 1, 1918.

Mr. Celso A. Caballero was appointed maintenance engineer on June 8, 1918.

Mr. Francis W. Dalrymple was transferred from the position of municipal engineer to that of chief engineer of the San Juan Harbor board on May 31, 1918.

Mr. Edward D. Gray was promoted from superintendent of public buildings to assistant chief of the division of public buildings on July 1, 1917, and resigned his position August 14, 1917.

Mr. Santiago Claudio Rodriguez was promoted from assistant engineer to assistant chief of the division of public buildings on May 1, 1918.

Mr. Manuel L. Miro Sauri was promoted from inspector to superintendent of public buildings on September 1, 1917.

## SUMMARY OF RECOMMENDATIONS.

The most important recommendations contained in the preceding pages of this report may be summarized as follows:

The immediate sale of the second installment of \$500,000 of road bonds, and in case difficulties should arise making it impossible favorably to dispose of the remaining \$1,000,000 of bonds authorized for roads and bridges, that the legislature provide other means of securing the funds necessary for the completion of the works authorized by the law of April 30, 1916.

An appropriation of at least \$900,000 for road maintenance for the fiscal year following the next session of the legislature.

Increase appropriations for the repair and maintenance of public buildings so as to provide funds for the reconstruction of the roofs of old government buildings.

An appropriation of \$18,000 per annum for a period of five years for the survey of public lands.



The revision of the laws relating to the leasing, utilization, and sale of public lands.

A law to provide for the lease of certain lots near the water front in San Juan.

An appropriation of \$10,000 and an additional sum of \$2,000 per year for reconstruction and repairs to harbor structures and approaching roadways of the ports of the island outside of San Juan.

Increased appropriation for the maintenance and improvement of the insular telegraph and telephone system, provisions for the payments of operators for extra hours of service, and an appropriation of \$3,000 for the temporary employment of substitutes for employees of the bureau who may be absent on account of vacation or sickness.

The consideration of the proposed new irrigation projects in the vicinity of Lajas and Isabela, and an appropriation to provide for the continuation of stream gauging and for the preparation of final plans and specifications for these projects.

In conclusion I wish to call special attention to the necessity and justice of increasing the salaries of many employees for the next fiscal year. In 1913-14 all salaries were reduced by the legislature and they have remained practically unchanged since that time. The salaries paid at present are too low and entirely out of proportion to the high cost of living and the ever increasing responsibilities of the employees due to the growing activities of the different divisions of this department. The prevailing low salaries and the opportunities offered to our engineers, architects, electricians, surveyors, etc., in better and newer fields of activity in our neighboring island of Santo Domingo will encourage our men to leave this department and increase the difficulty of finding trained men to fill their places.

Respectfully,

GUILLERMO ESTRUCCO,  
*Commissioner of the Interior.*

The honorable the GOVERNOR OF PORTO RICO.





DEPARTMENT OF THE INTERIOR

San Juan P.R. Jun. 30-1918

*J. M. Esteves*  
Comisioner of the Interior.

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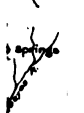
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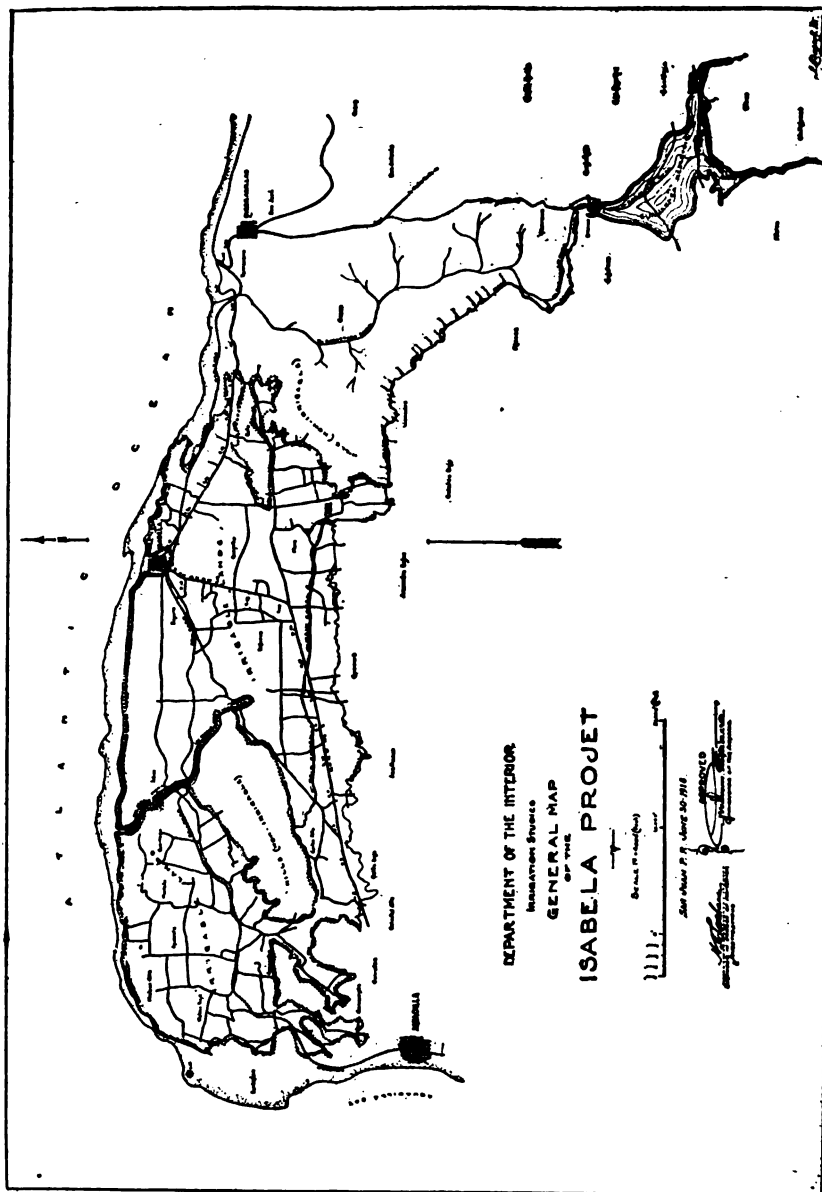
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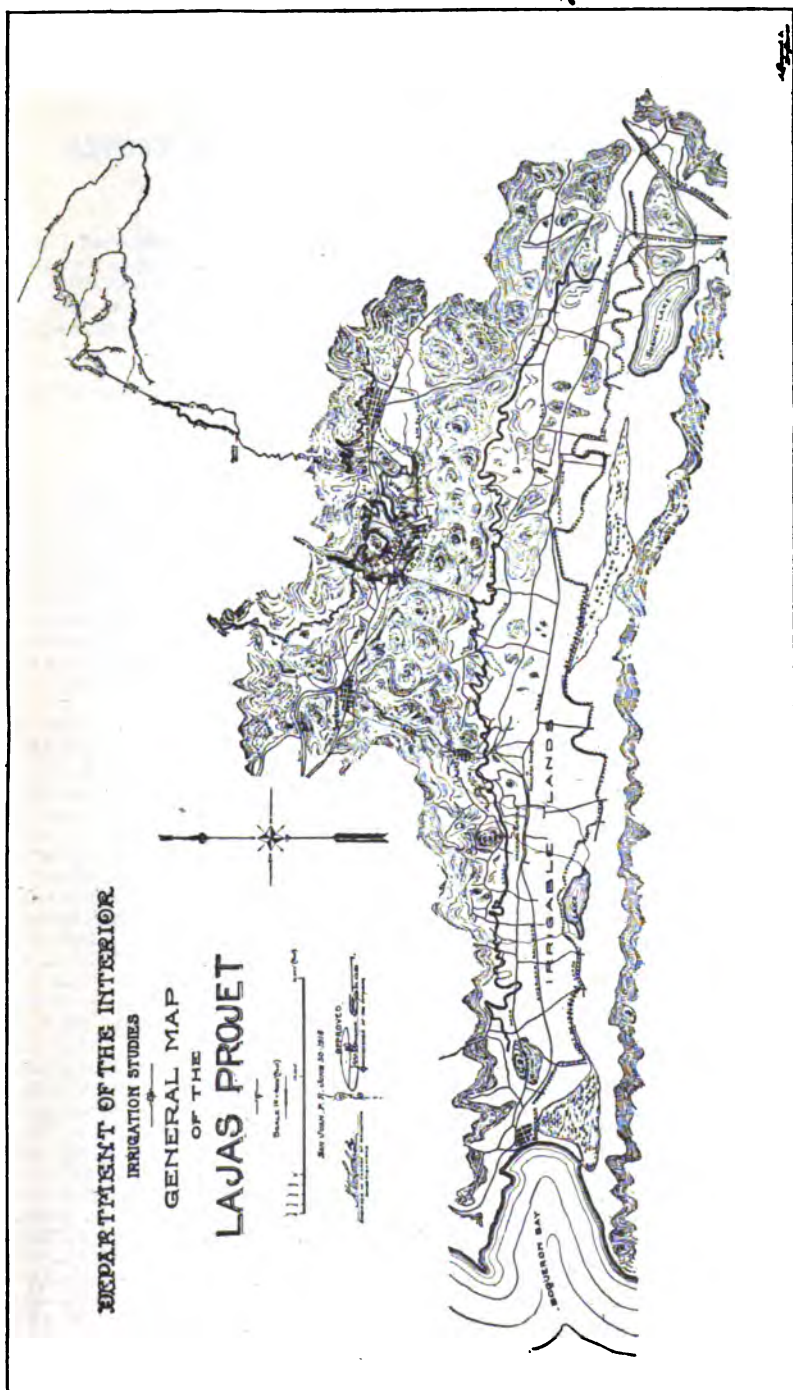


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## APPENDIX VII.

### REPORT OF THE COMMISSIONER OF EDUCATION.

OFFICE OF THE COMMISSIONER,  
*San Juan, P. R., August 20, 1918.*

SIR: I have the honor to transmit herewith the eighteenth annual report of the department of education, covering the fiscal year ending June 30, 1918. Appended thereto are the reports of the president of the board of trustees of the University of Porto Rico and of the president of the board of trustees of the Carnegie Library.

Respectfully submitted.

PAUL G. MILLER,  
*Commissioner of Education.*

The GOVERNOR OF PORTO RICO,  
*San Juan, P. R.*

#### INTRODUCTORY SURVEY.

For a detailed exposition of the history, organization, administration, courses of study, and other general features of the public-school system of Porto Rico the reader is referred to the previous annual reports of the department of education and to the various departmental bulletins.

The work of the public schools has been greatly handicapped during the past year through conditions brought about by the world war. The department has lost many of its most efficient men, who went into the military service. Not only due to war conditions, but also to the prevailing low salaries paid, frequent changes in the teaching corps have taken place, with the resulting loss of efficiency. The rural teaching force alone underwent 730 changes, whereas in the city of San Juan there were no less than 110.

In spite of these obstacles, the work of the schools during the past year has been characterized particularly by the various activities carried on by supervisors, teachers, and pupils toward promoting the success of the United States and its allies in the world war. The war activities of the schools will ever stand out conspicuously as witnesses of the loyalty and patriotism of teachers, pupils, and other persons who cooperated with them. In this respect, the work of the past year may be justly counted as a year of achievement and accomplishment unparalleled before in the history of Porto Rico and to be surpassed only, perhaps, by the new duties which the responsibilities of the new school year may bring.

Special attention has been devoted to increasing the food supply. There have been established 1,312 rural school gardens, 83 urban school gardens, 5,548 urban home gardens, and 21,145 rural home gardens (Table XIV).

For the promotion of community and war propaganda there were organized 1,177 committees for the promotion of agriculture, which conducted, in addition to their own, 2,380 public meetings. There were also in existence 831 parent associations which held 1,297 public meetings. Teachers made 60,038 visits to rural homes, and in cooperation with the food commission there were conducted 2,157 rural conferences for enlightening the public on the issues of the war and the promotion of agriculture. During conservation week the schools conducted over 2,000 meetings and secured 122,826 pledge cards (Table XV).

The chapter school committee of the Porto Rico Chapter, American National Red Cross, effected local organizations of the junior Red Cross in every municipality, with a total membership of 68,013 and total cash contributions amounting to \$21,511.22. In response to a special appeal made by the commissioner, 2,587 teachers out of a total of 2,649 in the service at the close of the year made a special contribution to the second war fund, which, together with amounts given by the office staff of the department, the supervisory force, employees of the university and certain employees of school boards, amounted to \$6,665.89.

Porto Rico has an estimated population of 1,223,981, of whom 427,666 are of legal school age, i. e., between 5 and 18 years, and 215,819 of compulsory school age, i. e., between 8 and 14 years (Table V). The total enrollment in all public schools, excluding duplicates, was 142,846. Of these, 84,570 were enrolled in rural schools, 50,060

in elementary urban schools, 3,346 in secondary schools, 3,613 in night schools, and 1,257 in the University of Porto Rico. Of the 141,589 pupils enrolled in schools under the department, 80,063 were males and 61,526 females; 113,462 were white and 28,127 colored (Tables II and III). In addition to the pupils enrolled in public schools, 7,248 children attended private schools (Table VIII).

The total enrollment was 33.1 per cent of the total population of school age and 65.6 per cent of the population of compulsory school age; but of the population of compulsory school age only 51.6 per cent were enrolled (Table V).

The average number belonging in all schools was 115,689; the average daily attendance 106,441, or 92 per cent. Of the 141,589 pupils enrolled, 2.4 per cent were found in secondary schools, 35.3 per cent in elementary urban schools, 59.8 per cent in rural schools, and 2.5 per cent in night schools (Table III).

These pupils were taught by 2,715 teachers, of whom 909 are men and 1,806 are women; 174 are teachers from the United States proper and 2,541 are native Porto Ricans; of the total number, 2,230 are white and 485 are colored (Table II).

Of the elementary pupils, 62.7 per cent were promoted to the next higher grade, as against 60.1 per cent the preceding year. These figures are based upon the total enrollment. Using the average number belonging as a basis for calculating promotions, 81.8 per cent of the elementary urban pupils were promoted and 72.6 per cent of the rural pupils, giving an average of 76.2 per cent for all elementary schools (Table IV).

Eighth-grade diplomas were awarded to 2,035 pupils, and 418 high-school pupils received diplomas.<sup>1</sup>

There were 42 new graded teachers added to the profession by means of licenses granted upon the basis of normal diplomas issued by the University of Porto Rico. Thirty rural licenses were granted to persons who had completed the special two-year course for rural teachers in the normal department of the University of Porto Rico, and 4 rural licenses were granted to persons who had obtained the diploma in agricultural science issued by the College of Agriculture and Mechanic Arts.

Summer schools for the training of rural teachers were held at Rio Piedras and Mayaguez, at the close of which 74 rural licenses were issued. Special examinations for the licensing of rural teachers were held also in October and November, resulting in the granting of 240 more rural licenses. This number, however, was not sufficient to supply the schools of the island, and it became necessary to issue 169 provisional licenses before the close of the year.

The schools of Porto Rico were conducted in 1,712 different school buildings, representing 2,845 different classrooms. Of these buildings, 540 are public property and 1,172 are rented; 316 are situated in urban centers and 1,396 in rural barrios. (Table VI.) As to their character, school buildings range from the straw-covered shack in remote rural barrios to thoroughly modern concrete structures in the larger towns and cities. During the past year 32 new sites for school buildings have been acquired, 5 in urban centers and 27 in rural barrios; 26 school buildings have been completed and 13 were begun and are in the course of construction.

The total assessed valuation of property is \$243,736,262, or \$199.01 per capita of population.<sup>2</sup>

The expenditure for educational purposes last year is \$1,594,855.43 from insular appropriation and other funds and \$730,947 from school-board funds, making a total of \$2,325,802.43.<sup>3</sup> (Tables II, IX, X, XI, XII, and XIII.)

The total per capita expenditure per pupil is \$14.16 for elementary education and \$34.80 for secondary education. The per capita expenditure per inhabitant is \$1.93. (Table IX.)

During the past fiscal year 64,847 pieces of mail, or an average of 216 pieces per day, were received and dispatched by the department; 56,031 of these were letters and 8,816 packages.

#### SCHOOL ALLOTMENT—URBAN VERSUS RURAL SCHOOLS.

Of the 427,666 children of school age in Porto Rico, 337,856 live in the rural barrios. Of this number, 84,570, or 25 per cent, were enrolled in the rural schools during the past year, whereas of the 89,810 children of school age living in the urban centers 53,406, or 59 per cent, were attending school. This takes no account of a total of 3,613 enrolled in the night schools.

The above summary goes to show that in the urban centers over one-half of the population of school age is attending school, while in the rural districts this holds

<sup>1</sup> Includes the practice school, boys' and girls' charity schools, and university high school.

<sup>2</sup> As of Dec. 31, 1917.

<sup>3</sup> Does not include charity and correctional schools.

true for but one-fourth of the population. In other words, in order to enroll the entire population of school age the number of urban schools would have to be multiplied by 2 and the number of rural schools by 4. Such an increase is totally out of the question for the present, in view of the economic status of the island. Furthermore, a close study of the question leads to the conclusion that a like increase would be wholly out of proportion to the actual needs. The fact that but one-fourth of the rural population of school age is at present enrolled in the rural schools by no means signifies that the remaining three-fourths are deprived of an opportunity to attend school. The reverse is nearer the truth. Probably no less than three-fourths of the rural population attend school for a limited number of years, while perhaps less than one-fourth fail to avail themselves of the opportunities that are at hand. Furthermore, the length of school attendance in the Tropics is necessarily less than in a northern climate. Not a few of our young men and women marry and assume family cares before they have attained the maximum school age. Any attempt, therefore, to enroll the total population of school age is, and will ever be, of impossible attainment in Porto Rico.

In regard to the disproportion between the urban and the rural population of school age actually enrolled in school, it must be recognized that it is far from being as great as appears at first sight. The following factors have to be taken into consideration:

1. Many of the well-to-do families residing in the country send their children to the town schools. In addition to this, a certain proportion of the rural school pupils enroll in the urban schools after they have completed the four-year course of the rural schools.

2. In all municipalities there is a large semiurban population which, in accordance with the island census, is counted with the rural population. Logically the children from these semiurban zones should be enrolled in rural schools. In practice, however, they invariably attend the urban schools.

Owing to the above reasons, the percentage of the rural school population actually enrolled in school is certainly much higher than is shown in our official records, and naturally the percentage for the urban population is correspondingly decreased.

3. A third and most vital consideration, which is generally lost sight of, is the difference in the relative length of the rural and urban courses of study and the bearing this necessarily has on the percentage of population to which an opportunity is given to attend school in each case. Rural school pupils should normally complete the four grades of the rural course of study in an equal number of years, whereas urban school pupils will normally need eight years to go through the eight grades of their course. A given number of rural schools can therefore provide a given number of pupils with the essential requirements of an elementary education, as embodied in the rural course of study, in one-half the time in which these same pupils could be put through the graded course of study. In other words, one rural school, within its limited scope, does for the rural community what it takes two graded schools to do for the town population. Carrying this reasoning to its logical conclusion, we are compelled to recognize that in the time required by 50 or 52 per cent of the urban population of school age to complete the eight-year course of the urban schools, two shifts of rural pupils, each consisting of approximately 27 per cent of the rural population of school age, will have found its way into the rural schools. Instead, therefore, of the relative per cents of the urban and rural population that we are able to provide with school facilities being 59 and 25, respectively, it is much closer to being 50 and 54 per cent. It is not possible to give exact figures. There are factors in each case which can not be subjected to mathematical precision. The proportion of urban pupils who go through the eight grades of the town schools is relatively small, and the same no doubt applies with equal strength in the case of rural school pupils. But the final, outstanding conclusion to the effect that as high a percentage of the rural population of school age is provided with an opportunity to attend school for a limited time as obtains in the case of the urban population is one that can not be questioned.

Official statistics to the contrary, it may be safely assumed that no country child, no matter how remote or isolated his residence, is at present deprived of an opportunity to secure the elements of an education in the rural schools, provided his parents are disposed to have him do so. Unfortunately, as much can not be said in the case of the urban population. The relative needs of the urban and rural populations have always been calculated on the figures given by the island census without regard to actual conditions, and the tendency, as a result, has invariably been to favor the rural population at the cost of the urban centers. This is shown by contrasting the appropriations for common schools in the budget of 1913-14 with that of the present budget.

	Budget.		Increase.
	1913-14	1917-18	
Total of urban teachers provided for .....	985	997	<i>Per cent.</i> 1.2
Total of rural teachers provided for .....	1,141	1,660	45.4

The results of this policy have been that whereas in many municipalities rural teachers are unable to fill their schools to their normal capacity in many of the urban centers, notably in such towns as San Juan, Ponce, Caguas, Bayamon, and Aguadilla, hundreds of children who clamor for admission at the opening of each school year have to be turned away. The absolute shortage of urban schools has been more especially felt of late years as a result of the city growth and the abolition of the double-enrollment plan.

#### RURAL EDUCATION.

The number of rural schools opened during the year was 1,440. This takes no account of the rural schools opened in the semiurban zone and in some of the urban centers, as these schools follow the graded course of study and are considered part of the urban school system. The withdrawal of teachers, both urban and rural, to go into military service and into other work, has been one of the most perplexing features of the year's work. An unusual number of graded and rural teachers resigned during the course of the year and as vacancies in the corps of graded teachers are generally filled by the promotions of rural teachers who hold the graded license, the rural schools were the ones particularly affected. A total of 730 changes took place in the rural schools. This means that approximately one-half of the rural schools have had more than one teacher during the year.

After the first month of the year the number of vacancies in the rural schools compelled the department to hold special examinations in all districts for candidates for the rural license. For admission to these examinations a minimum of two years' high-school work was required. A total of 238 new teachers were thus secured, but many of the successful candidates elected to continue their high-school studies and the supply of teachers was again exhausted by the middle of the year. By virtue of a special act of the legislature, approved February 19, 1918, the commissioner of education was empowered to grant provisional licenses without the requisite of an examination, and valid only until the end of the year, to such persons as in his opinion had the required qualifications to act as teachers. A total of 169 such licenses were issued during the last months of the year.

These numerous changes made the work of the supervisory force and of the department particularly difficult. To train a total of 730 new teachers, practically half the rural teaching force, to a satisfactory standard of efficiency is a problem to tax the industry, patience, and skill of the best supervisory force. The policy of the department, under such circumstances, has necessarily been to emphasize constructive supervision. Professional study and reading courses have been established, frequent teachers' meetings and demonstration classes have been held in all the districts and everywhere much of the supervisors' time has had to be devoted to the strengthening of this unduly large proportion of new rural teachers.

Out of 1,440 rural schools, 1,262, or 87 per cent, were on the double enrollment plan, i. e., they had one group of pupils, up to a maximum of 40, during the three hours of the morning session and another similar group in the afternoon for the same length of time. This arrangement allows the pupils to take their noonday meal at home and it also makes it possible for the older ones among them to help their parents at home and on the farm during part of the day. This is a very important consideration during the coffee picking season, from September to December, when the entire population of some of the districts, old and young, is employed in the coffee harvest. This double enrollment plan, while it has its serious disadvantages, insures a better enrollment and attendance.

The total number of pupils enrolled in the rural schools during the year is 84,570 and of this total 48,821, or 58 per cent, were promoted. This low percentage of promotion is largely accounted for by the frequent changes in the teaching force and the closing of many schools for want of teachers.

## CONSOLIDATED RURAL SCHOOLS.

A familiarity with the rural school situation leads to the inevitable conclusion that the future need is for better schools rather than for more schools. The emphasis has to be placed on better buildings, better equipment, on a fuller and necessarily longer course of study, with special provisions for the teaching of home economics, and manual training, of agriculture, and other industrial subjects. This will demand better teachers and, as a logical accompaniment, higher salaries. The consolidated rural school brings together three, four, or more rural schools within one building or common center in contrast with the present isolated school plan wherein an underpaid, and often poorly prepared and immature teacher has to struggle alone as best he can with three, four, or more grades under his sole charge, and with a large enrollment on the half-day plan. Such consolidated rural schools should eventually become the community centers of their barrios, and rural libraries, noonday lunches for the underfed pupils, medical inspection, and entertainments are some of the community improvements that would be brought within the scope of practical, successful achievement.

The question is primarily one of financial resources to meet the need of better salaries and better buildings and equipment. Consolidated rural schools also presuppose a good system of rural roads. Above all, the many streams and rivers that swell into raging torrents at each rainy spell will have to be bridged so as to make it possible for the children of relatively large rural districts to gather together at a common school center. The problem, therefore, is not one of immediate solution, but a beginning has been made and a number of consolidated rural schools are already in operation. The opportunities in this line, for the present, are limited to the coast districts where better means of communication are available. In this direction rather than in the continued increase of the number of isolated rural schools lies the final solution of the problem of rural education for Porto Rico.

## GRADED SCHOOLS.

The work of the graded schools has been carried on very much along the same general lines as in former years. The more important changes have been the following:

1. The teaching of English on a strictly oral basis, which last year was introduced in the first grade of the urban schools, has been extended to the second grade of the urban and to the second and third grades of the rural schools as well. In addition to the first grade manual in oral English, which was published last year, a manual for the second grade has now been put into the hands of all primary teachers. A third grade manual has also been under preparation and has been given a thorough preliminary test in some districts.

The shifting from reading to conversation as a medium for the teaching of English in the primary grades meets the needs of pupils and leads them along a natural and easy road to the stage where they are enabled to carry on the bulk of their studies in the English language, as is required of them in the intermediate and grammar grades. It brings the Porto Rican child in this one particular one step nearer to the level of the American child who hears and talks English four or five years before he is required to read it.

2. The policy of the department to provide pupils with books specially designed for them was further advanced last year by the introduction of a specially prepared textbook in arithmetic for the use of third and fourth grade pupils. The text is in Spanish. It supplements and carries forward the beginnings made last year when a special manual for the teaching of arithmetic in the first and second grades was prepared and issued to the teachers.

3. A special pamphlet on moral and civic training has also been prepared and issued. Formal instruction in this subject has now been made a brief but regular feature of the daily program of our schools. The need for something of this sort was realized a long time ago. The past history of the island, the limited experience of the people in self-government, the illiteracy which still prevails in the country districts and the relatively few agencies, outside of the public schools, making for the enlightenment and the upbuilding of the people along moral and social lines brought the need for such a course into plain evidence.

The improvement which has taken place in the primary grades as a result of the introduction of a better coordinated system of teaching such elementary subjects as Spanish, English, writing and arithmetic, in closer harmony with the needs and the life experience of Porto Rico children, has everywhere been a remarkable one. Better general results are evident and this appears in the percentage of promotions from these lower grades.

*Per cent of promotions, urban schools.*

	1914-15	1915-16	1916-17	1917-18	Increase over 1914-15.
First grade.....	45.9	48	65	64.3	18.4
Second grade.....	56.7	60	66	73.1	16.4
Third grade.....	60.8	64	66	72.3	11.5

Much of this improvement is the result of the introduction and use of specially prepared textbooks in which the standpoint of the Porto Rican child, his experience, and his needs are given due consideration. The department plans to extend gradually the policy of using specially prepared books and to exclude those which in no way provide for the special requirements of the Porto Rican child.

**HIGH AND CONTINUATION SCHOOLS.**

Secondary school work was carried on in 11 high and 26 continuation schools, not including the University High School at Rio Piedras nor the preparatory department of the College of Agriculture and Mechanic Arts, Mayaguez. In addition to the 11 regular four-year high schools, ninth grade work was taught in 26 and tenth grade work in 11 municipalities.

The total enrollment in secondary schools was 3,346, of which number 1,584 were boys and 1,732 were girls. These figures show an increase in the enrollment over that of any previous year, but a relative decrease in the number of boys enrolled as compared with the preceding year. The enrollment was distributed as follows: Twelfth grade, 382; eleventh grade, 601; tenth grade, 898; ninth grade, 1,465.

The total number of graduates from the 11 department high schools was 347; from the general courses, 310; from the commercial course, 37. The University of Porto Rico issued 71 secondary diplomas.

Difficulty in securing texts and supplies because of delays in transportation, the shifting of teachers because of vacancies brought about by war conditions, and the decrease of enrollment due to economic conditions made the year a trying one to teachers, principals, and supervisors.

Notwithstanding these things, the quality of work done was generally satisfactory and no cases of discipline of any kind marred the year's work.

The central high school at San Juan continued to occupy a building entirely unsuited for a school. Lack of teaching force and school-room capacity made it necessary to refuse admission to many applicants, and as a consequence ninth grades were organized at other schools centers in San Juan; but even by the organization of these extra ninth grades many ambitious young people could not secure admission.

**WAR WORK OF THE SCHOOLS.**

The all-pervading activity of the schools during the year was the work of teachers and pupils in connection with the world war. The complete mobilization of the life forces of the Nation and of its material resources for the successful prosecution of the war which had been effected throughout the United States had likewise been put into operation here. Porto Rico, which had but recently been granted the privilege of American citizenship, could not remain indifferent to the conflict in which the Nation had become involved.

**THE FOOD QUESTION.**

Although in its commercial relations with the mainland, Porto Rico during the fiscal year ending June 30, 1917, had a balance in its favor of \$27,000,000, largely as a result of its constantly growing exports of sugar, tobacco, and fruit, the exports under these three heads along totaling \$70,468,907, it nevertheless depended upon the United States for a very large proportion of its food supply.

The war brought into striking relief all the disadvantages and dangers of Porto Rico's dependence upon the distant markets of the United States for her daily food supply and the need of taking immediate measures to place herself on a relative basis of self-support. It is owing to this that the appeal of the United States Food Commissioner, to save food and to add to the sources of its supply, carried special weight in the case of Porto Rico. The appeal fell on soil already prepared. To the incentive of patriotism there was added the all-compelling force of the instinct of self-preservation.

## COOPERATION WITH THE PORTO RICO FOOD COMMISSION.

In the matter of promoting the agricultural interests, the department worked in cooperation and harmony with the local food commission. A total of 35 supervisors of agriculture were employed during the year. Twenty-five of these were special agents of the food commission and were paid out of its special funds. The remaining 10 were paid out of the funds of the department. All of them, however, were in equally close relations with the department and all worked through and with the supervisors and teachers of the public schools for the improvement of the food situation. Teachers everywhere, those in the country districts especially, served as distributing agents for the pamphlets and circulars issued by the food commission. Rural teachers acted as the local representatives of the commission, collected the necessary information, and made regular reports about the food situation of their respective barrios.

## FOOD CONSERVATION WEEK.

All the wheat flour consumed in Porto Rico, a total of 310,516 barrels for the fiscal year 1916-17, was imported from the United States. Wheat being the cornerstone of the national food conservation campaign, it behooved Porto Rico to do its share in the conservation of this food product. As wheat does not grow in the Tropics, Porto Rico could only help by limiting its consumption of white bread. A further appeal was made by the food commission for economy in the consumption of such other imported foodstuffs as were needed by the people of the allied countries. To bring about this result, an island-wide campaign of education and propaganda became necessary. A direct appeal had to be made to the patriotism and good will of every inhabitant. A large part of this work naturally devolved upon the rural schools.

During "Food conservation week," a campaign was conducted by public school teachers in every town and barrio of the island. The number of public meetings held during that week exceeded 2,000. Both urban and rural teachers made a house-to-house canvass to explain the meaning of the pledge card and to secure signatures. The following quotations from reports of two district supervisors give a better idea of the activities carried out.

The supervisor of Isabela states:

"During food conservation week, the pupils of the schools prepared posters with appropriate drawings and mottoes, and they posted them at street corners and along country roads. In addition to the civic parades, public meetings and home visits on the part of the teachers which marked the week, the housekeepers of the town met twice under the direction of the home economics teacher and were given practical demonstrations in regard to the intelligent and economical use of foodstuffs. Practical recipes were studied and illustrated. The home economics teacher also visited the barrios of the municipality and held meetings with the country housekeepers. The expenses connected with this campaign were paid by the local agricultural committee."

The supervisor of Caguas states:

"The parade organized in Caguas during food conservation week was one of the biggest ever held here. No less than 5,000 persons took part. Every public school pupil marched.

"In addition to the meetings held in the urban zone, 91 public meetings were held in the barrios of the district during that week. I have every reason to believe that the campaign would have been a failure, in the country districts especially, but for the enthusiastic and efficient cooperation of the schools. During the same week, a total of 1,823 homes were visited by the teachers for the purpose of explaining the food situation. A total of 4,808 pledge cards were signed."

Similar reports were received from every district supervisor. A grand total of 122,826 pledge cards were signed through the efforts of the schools.

## AGRICULTURAL AND PATRIOTIC PROPAGANDA.

The following summary will tell in a few words the nature and extent of the campaign carried on by the schools.

Number of agricultural committees (comités de fomento escolar y agrícola) organized.....	1,177
Number of public meetings held by these committees.....	2,380
Number of parents' associations.....	831
Number of public meetings held by these associations.....	1,297
Number of rural conferences.....	2,157
Number of rural homes visited by teachers.....	60,038
Number of school gardens.....	1,385
Number of home or war gardens.....	26,063
Total number of gardens established or promoted by the schools.....	28,068



These thousands of home visits and public meetings have made a deep and lasting impression on the people. The gospel of food economy, of increased food production, of improved methods of cultivation, and the need of planting a greater variety of products has been preached to the remotest barrio of the island.

Patriotic propaganda has also been stressed. A campaign of education to explain the causes and the aims of the war, its relation to the people of the United States and of Porto Rico, the duty of every citizen to contribute to the successful outcome on the conflict in the fullest measure of his powers and resources, has been conducted from one corner of the island to the other.

#### WAR LITERATURE AND PATRIOTIC INSTRUCTION.

Teachers have found ample material for both their daily classes and for their conferences with the people of their respective communities in the literature that has been supplied them by the department and by the insular food commission. A number of pamphlets from various patriotic organizations in the United States were also secured and mailed to the teachers. In addition to this, the department purchased a full supply of the monthly bulletins issued by the Commissioner of Education of the United States, entitled "Lessons in community and national life," and incorporated these in the regular course of study in English and civics for all the upper grades of the common schools and for the continuation and high schools.

"Democracy to-day," a collection of President Wilson's principal war addresses, as well as speeches by other prominent statesmen, properly edited for class work, was used as a text in high school work. Spanish copies of "How the war came to America," published by the committee on public information, were distributed to all teachers and school board members, in order to enable them to become thoroughly posted on the issues on which the Nation entered the war.

The result has been that many of the teachers and not a few of the older pupils have become efficient propagandists, ready and able to take part in the molding of public opinion along patriotic lines.

#### AGRICULTURAL COMMITTEES.

In order to popularize the movement for food conservation and for increased food production, a local committee officially known as "Comité de Fomento Escolar y Agrícola" was formed in every barrio. Each was composed of five influential citizens, preferably farmers of the more intelligent and progressive class. These committees met periodically in the schoolhouse and planned their work in close cooperation with the rural teacher and with the agricultural agent of the district. Each committee held public meetings for purposes of propaganda among the inhabitants of the barrio. The local teacher and a number of prominent people from the nearby town took an active part in the meetings. The supervisor of schools and the agricultural agent of the district also took part whenever their other duties permitted. A total of 1,177 of these committees were organized during the year and they held a total of 2,380 public meetings.

#### PARENTS' ASSOCIATIONS.

The organization of parents' associations dates back three years. While a certain number of these associations were this year merged into the agricultural committees and in a way absorbed by them, many carried on their independent activities. There were a total of 831 such associations and they held a total of 1,297 public meetings. While the subjects discussed at these meetings had a special relation to the life of the school in its more limited educational or professional aspect, questions of general interest and especially those related to the world war did not fail to receive their due share of attention.

#### RURAL CONFERENCES.

In addition to the meetings held under the auspices of agricultural committees and parents' associations, all more or less local in character, conferences of a more general nature have been held under the immediate direction of the supervisors of schools in all the towns and main barrios. Special speakers were secured for these conferences, both the insular food commission and the department of education sending occasional representatives. The local municipal authorities and professional men and many public-spirited citizens throughout the island gave their services as speakers. At the close of the year the commissioner of education sent a personal letter of thanks and appreciation to each one of these men. A total of 2,157 of these general conferences were held during the year.

The enthusiasm aroused by this island-wide propaganda is evident. This is the first time in the history of Porto Rico that a campaign of education has been undertaken in behalf of the population at large. These meetings have served as popular forums in which questions of public interest have been brought to the attention of a people still illiterate in its majority, who can not be reached by means of the daily press or any other agency except direct contact. Porto Ricans have come to realize the meaning of the great war, their responsibilities, and the opportunity they have for demonstrating their loyalty to the Nation and to the cause for which it fights. The beginnings of an intelligent community life have been laid in the country districts; common needs and common dangers have united the people in a common effort. If these public meetings have rendered good service during war times, there is every reason to expect that they may render equally valuable service after peace has been restored.

The material results of the campaign, the extent to which wheat and other food articles have been saved, can not be exactly estimated, as statistics are not available. The success obtained in the way of increased food production, however, is most gratifying. Above all, the home-garden movement holds special promise for the future. The large farm and plantation owners have come to realize the need for a greater variety of products. They now plant large acreages to corn, beans, potatoes, onions, and yautías, whereas in the past they limited their activities to a few standard products, to cane, coffee, tobacco, and the like. Better methods of cultivation have been advocated, and their importance is better understood. Certain sections of the island not only raise enough vegetables for their own needs, but now produce a relative surplus for other markets.

Above all, the school-garden movement holds special promise for the future, as is indicated by the accomplishments of the past year. There were established 1,213 rural and 83 urban school gardens for instructional purposes. Only 103 rural schools did not have school gardens, generally for lack of land. The total acreage cultivated by schools for instructional purposes is 374. To the cursory reader this may appear to be a small amount, but one should consider that the total is greater than the amount of land cultivated for experimental purposes by the College of Agriculture and Mechanic Arts and the Federal and Insular Experiment Stations combined. The numerous school gardens scattered throughout all sections of Porto Rico offer the added advantage of dealing with all types of soils and climatic conditions to be found here, as well as being in close relation to the life and interests of the peasantry which can be reached only by direct contact.

The schools have fostered the establishment of a total of 26,693 home gardens, 5,548 in the urban zone and 21,145 in rural barrios, thus making a grand total of 28,088 gardens established or promoted by the schools. The name, whether war gardens, liberty gardens, or merely home gardens, as they are called in Porto Rico, makes little difference. The one outstanding fact is that they help Porto Rico to solve the food problem.

Twenty-five agricultural exhibits held in various towns toward the close of the school year have attracted deserved attention, both for the quality and for the quantity of the products exhibited. Some of these exhibits compare very favorably with those held in the United States.

A few quotations from the reports of the district supervisors are herewith given, so as to show more vividly the nature of the work that was accomplished.

The supervisor of the Toa Baja district reports:

"The work in agriculture in this district has been directed along practical lines. We have done our full share of preaching, but most of our efforts have been in the way of getting land from the large plantation owners for cultivation by the poor laborers. The use of the land was donated outright by the large proprietors, or it was given on the 'medianero' plan. We have inspected the home gardens, distributed seeds and seedlings, and helped and stimulated in every way open to us. Committees of school children visited the homes of the people and reported on the progress of home gardens. The small proprietor or laborer thus realized that he was working under the public eye, and the efforts he put forth and the results he accomplished were all the greater."

From the Isabela supervisor:

"All the rural and graded schools of this district maintain their school gardens. The only exception is the Isabela graded school, where it has been not possible to obtain a suitable plot of land. The pupils of this particular school, however, have prepared seed beds and have made it their object to supply the near-by 'home gardeners' with suitable seeds and seedlings. In the addition to the many home gardens in the district, there are 10 farmers who have large demonstration plots.

"A total of 45 agricultural conferences have been held in the barrios of Isabela. This work has been under the direction of the supervisor of agriculture, of the supervisor of schools, and of the members of the local agricultural committee. Many of the more influential farmers have given us their enthusiastic cooperation. Subcommittees held meetings of their own in the more distant barrios. The movement to establish cooperative societies among the country population originated in the barrios of Coto and Guaynabo, of Isabela.

"Five agricultural exhibits were held in the district during the year and visitors were given a practical, objective demonstration of the value of school and home gardens.

"There were 21 'junior agricultural committees' through the district. Their membership was made up of school pupils. These acted as the 'Boy Scouts' of the agricultural movement and rendered especially valuable service in collecting and distributing seeds, in distributing food campaign bulletins and literature, in posting cards and advertisements sent out by the insular food commission on the town walls and on trees along the country roads. We also had five women's committees, whose mission it was to visit the housekeepers and familiarize them with the details of the food campaign."

#### WORK IN HOME ECONOMICS.

The course of study in home economics, including both cooking and sewing, comprised four years of work, extending from the seventh through the tenth. This work was conducted in 42 municipalities.

A two weeks' summer school for teachers of home economics was held in August to study the new conditions and the new work for the ensuing school year.

Owing to changed living conditions due to the war, the course of study in practical cooking was changed entirely. Since it was feared that communication with the mainland might be cut off special bulletins were prepared to instruct students and their families in a diet that would make use of local food products. An effort was also made in these bulletins to increase local production of the necessary carbohydrates, proteids, and fats.

Recipes for the preparation of pie and bread were entirely omitted, quick breads and local substitutes taking their places. In all other recipes calling for wheat flour, starch extracted from native vegetables such as yautía and batata was substituted. A simple home process was explained whereby the large percentage of starch contained in these vegetables could easily be extracted. Children learned to make use of this starch for thickening sauces, soups, and gravies, the starch serving as an excellent substitute for flour and the cornstarch ordinarily used.

Lard and butter were omitted from all recipes and coconut fat, coconut milk, or coconut butter, substituted. Coconut fat was extracted and bottled in the classroom.

Frying as a process was eliminated and baking substituted.

In place of bread there were substituted baked or boiled yautía, baked or boiled batata, baked platanos, casabe, sorullos, arepas, gofio, hallacas, and cornbread. Slices of boiled yautía and boiled batata displaced bread in making sandwiches, for which as a filling peanut butter, shredded coconut, or a combination of these was used.

A study of local food possibilities was made with the following results:

*Proteids.*—A special campaign was started to promote the use of fish found in Porto Rican waters. The value of fish as a proteid was pointed out. New recipes for using fish were taught and attention was called to the old ones.

Although beans as a necessary food were grown extensively as a result of the food campaign, a propaganda was begun among the home economics students to grow beans, peas, gandules, and garbanzos in the home gardens.

Peanuts were planted in the school gardens by classes in home economics, seeds being sent out from the food commission. Seed peanuts were also distributed among the students for their home gardens. The purpose of growing peanuts was to secure a sufficient quantity for making peanut butter and for use in other recipes.

Emphasis was laid upon recipes teaching the cooking of garbanzos, peas, gandules, and frijoles, all of which rank high in proteid content, and their place in a balanced diet was discussed.

*Carbohydrates.*—As Porto Rico possesses a variety of food products rich in starch, such as yautía, batata, ñame, platanos, malanga, breadfruit, yuca, and potatoes, the use of these was emphasized. In order to prove to the community that starch is starch whether taken from grains or vegetables, that starch not derived from wheat furnishes as much nourishment as wheat starch, and that it can be used in all recipes calling for wheat flour with the exception of bread, collections of starch from native vege-

tables and seeds were made in all schools. Each class in home economics prepared an exhibit showing the comparative value of starch-bearing food products. The use of these starches as substitutes was taught in all recipes calling for flour and with very good success. The starch exhibit was shown to mothers' classes and explained to the public. At the University of Porto Rico a dryer was installed and excellent results obtained in the making of flour from yautía and batata.

Restrictions were placed on the use of sugar by eliminating candies and by encouraging the use of the abundant native fruits.

Twenty-four recipes dealing with the substitution of corn or corn meal for wheat flour were taught and were used widely in the homes. The use of corn meal from native corn was given much attention. Now it is used not only as a wheat flour substitute, but in all recipes calling for bread crumbs.

*Fats.*—Butter was not carried by local stores in small towns after November. Lard advanced in price to 45 cents a pound in the interior towns, a prohibitive price for poor people. Olive oil became so expensive that poor people could seldom buy it. On account of these conditions local fats were substituted in all recipes. Coconut fat was used in recipes for frying, and coconut milk was used in boiled and scalloped dishes, such as beans, rice, and garbanzos. Grated coconut was often combined with scalloped vegetables. Coconut butter was used in place of olive oil with some vegetables, on bread and in sandwiches. This butter was churned from coconut milk, following the same process as that used with cow's milk. The use of aguacates, which are rich in fat, was encouraged. Cacao was utilized in the making of chocolate because of its fat content.

The uselessness and wastefulness of serving rice, bread, yautía, and platano at one meal was studied in order to eliminate waste. In short, the entire course in cooking was adapted to war needs.

While the students of home economics were taught a year ago the possible use of local food products in the event of a food shortage, the sinking of the *Carolina* brought home to the people the absolute practicability of such teaching and increased interest in both students and outsiders developed with very gratifying success. As the result of a year's teaching along these lines, the number of home gardens increased materially. In nearly every town every student of home economics had a garden. Gardens were planted and studied by girls as a war measure, so that women might learn to produce as well as to prepare food.

Cost tables were prepared for fruits, vegetables, and staple groceries, and each month the prevailing prices were entered so that every student might be conversant with existing prices as well as the amount prices increased. Such tables served to teach students when fruits and vegetables are most plentiful and therefore cheapest, so that they received some impressive lessons in when and what to buy.

Through the home economics department, a bulletin board was maintained for the benefit of the whole school, on which bulletins and posters of the food commission were displayed. In many instances a second bulletin board was placed in front of the building for the benefit of the public. These posters and bulletins were studied first by the home economics classes and then passed on for the benefit of the rest of the school.

An exhibit of the year's work was held in each town at the close of school. Collections of starch, wheat-bread substitutes, industrial cards, and sewing work were shown. Laundering utensils, the proper setting of a table and invalid trays were often included. The care and feeding of infants was featured by means of a doll dressed as a baby, showing clothing, feeding bottle, and bed.

#### EXTENSION WORK IN HOME ECONOMICS.

Mothers' classes taught in Spanish were given by Porto Rican teachers of home economics once a week. These classes covered a period of two hours. The use of wheat substitutes and war-time menus was studied. These classes varied in size from 10 to 80 persons. In small classes, actual cooking was done; in larger ones, demonstration lectures were given.

Neighborhood evenings were held once a month in the home economics rooms, at which meetings subjects relating to home and community life as affected by the war were discussed. Men, women, and older students attended these meetings, which usually were crowded.

Extension work by the teachers of home economics was carried on in some of the rural districts by means of lectures and demonstrations. An oven made from a 5-gallon oil can was shown. This was done to promote baking and to decrease frying. Bread substitutes were taught and gardening was encouraged at these meetings.

## SEWING.

Sewing classes studied the change produced in the clothing problem by war. Clothing conservation was taught, as well as the purchase of durable clothing and the elimination of unessentials, such as laces, ribbons, dress trimmings, and jewelry.

All fourth-year classes made pajamas for the Red Cross. The classes at the university alone furnished 200 suits of pajamas. In addition to the regular course of study there were made as refugee garments 50 nightingales and 50 small petticoats.

The change made in the course of study in the past year has paved the way for still greater adaptation to war conditions. The practice secured will make it possible to do much work in refugee garments, while the hospital garments will continue to be made as long as money and materials are available.

## WORK IN MANUAL ARTS.

The work in manual arts for the past year has been badly handicapped because of the entrance of more than one-half of the teaching force into the service of the United States as either officers or soldiers. The other half has left in a restless condition, but, in spite of this fact, the year's work as outlined was completed and many problems suitable for use by the Red Cross and the Y. M. C. A. were worked out. These problems included knitting needles, food driers, beds, tables, bed supports, checker boards, and folding chairs. The latter are especially appreciated by the men at Camp Las Casas. The manual-arts classes in every town where this subject was taught made bulletin boards for the posters of the United States Food Commission. All this work was done in addition to the regular repair work, class work, and community work done by the pupils.

While it was impossible to hold the annual exhibition on account of adverse war conditions and the changes in the teaching staff, it did not prevent any town from holding a local exhibit. Some of these exhibits, such as those in Ponce and Mayaguez, attracted the favorable attention of the local press, school boards, and the public in general.

The introduction of textbooks in manual arts in those towns where the books arrived on time helped in the success of the work. One thing that is still badly needed is a teachers' handbook, such as is used in the Philippines. Material for such a book has been contributed by the Porto Rico School Review, under the heading of "Teaching Manual Arts in Porto Rico."

In order to fill the many vacancies in the manual arts teaching force, caused by war conditions, a summer session was held at the College of Agriculture and Mechanic Arts for high-school graduates who had done exceptional work in this subject and who were especially recommended by the respective supervisors of schools. The results of this summer school were gratifying, though most of the candidates were necessarily young, the average age being 21 years. Enough candidates were obtained to fill all vacancies. A great help to the successful completion of the year's work was the requisitioning of all material used before the beginning of the school year.

## JUNIOR RED CROSS DRIVE.

The commissioner of education, together with Dr. José Gómez Brioso, president of the school board of San Juan, and Miss Grace J. Ferguson, supervisor of home economics, were designated as the chapter school committee of the Porto Rico Chapter of the American National Red Cross for the purpose of organizing and carrying out the junior Red Cross drive. In every municipality there was appointed a local committee of three members consisting, as a rule, of the supervisor of schools or the acting principal, the president of the school board, and a teacher, usually the teacher of home economics.

Owing to the fact that the public schools were engaged in one kind or another of war work since the outbreak of the war, the committee delayed organizing the junior Red Cross membership and financial campaign until the early part of the month of May. Beginning Monday, May 6, patriotic exercises for school children were held in all municipalities in accordance with a prescribed program sent out from the department. Tuesday was devoted to the study of "How the Red Cross Began"; Wednesday to "The Red Cross in Peace"; Thursday to "The Red Cross in War"; Friday to "How I Can Help." Saturday, May 11, was set aside for school festivals for the purpose of raising money.

Teachers and children, aided by a generous public, responded loyally and patriotically to the efforts of the chapter school committee and local committees. These efforts were handicapped by the nonarrival of Red Cross buttons and a meager supply of campaign literature. Although the results may not compare favorably with those

attained in the United States, they are considered exceptionally good when one bears in mind the high degree of poverty prevailing in many parts of Porto Rico and also the fact that no special effort was made to carry the campaign to rural schools, which have done heroic work in the matter of increasing the food supply.

In the list of members the Ponce district stands first with 7,551, including all children enrolled in urban and rural schools. San Juan holds first rank as to total cash raised, \$3,112.77. The largest amount in proportion to population and wealth was contributed by Barceloneta, \$665.77. The largest contribution from a single school came from the central grammar school of San Juan, namely, \$644. The best record for the amount of money contributed per pupil is held by a private school, the Colegio Arcibefio de Ninas, with a membership of 39 and a contribution of \$75.50. Of private schools, the Liceo Ponceño, with a membership of 154, made the largest contribution, \$166.70.

The boys' and girls' charity schools, Santurce, enrolled all of their pupils and sent liberal contributions.

In 52 municipalities all the urban-school pupils were enrolled as members of the junior Red Cross, and in 11 municipalities, namely, San Juan, Ponce, Arecibo, Fajardo, Guayama, Gurabo, Hatillo, Juncos, Patillas, Barceloneta and Camuy, all pupils, both urban and rural, were so enrolled.

Following is a detailed statement of membership and cash contributions by municipalities and a separate statement for special and private schools.

Town.	Members.	Cash.	Town.	Members.	Cash.
Adjuntas.....	625	\$302.36	Naguabo.....	648	\$162.00
Aguada.....	179	52.25	Naranjito.....	183	126.34
Aguadilla.....	1,095	273.75	Patillas.....	1,106	293.00
Aguas Buenas.....	218	69.00	Peñuelas.....	398	112.00
Albionito.....	380	100.00	Ponce.....	7,551	2,006.74
Añasco.....	412	130.57	Quebradillas.....	425	121.25
Arecibo.....	4,388	1,097.09	Rincon.....	300	92.38
Arroyo.....	497	280.76	Rio Grande.....	400	103.34
Barceloneta.....	626	665.77	Rio Piedras.....	854	213.50
Barranquitas.....	162	50.50	Sabana Grande.....	545	306.25
Barros.....	238	93.50	Salinas.....	731	182.75
Bayamon.....	986	490.27	San German.....	739	277.36
Cabo Rojo.....	589	147.58	Santa Isabel.....	350	87.26
Caguas.....	2,141	535.28	San Juan.....	5,959	3,112.77
Camuy.....	1,347	452.33	San Lorenzo.....	561	197.70
Carolina.....	845	242.24	San Sebastian.....	836	274.38
Cavey.....	1,297	324.45	Ton Alto.....	290	82.75
Celba.....	216	51.35	Ton Alto.....	461	115.45
Ciales.....	600	149.81	Trujillo Alto.....	167	45.00
Cidra.....	266	139.50	Utado.....	1,608	400.82
Coamo.....	420	104.56	Vega Alta.....	298	52.00
Comerio.....	540	143.32	Vega Baja.....	848	160.00
Corozal.....	272	68.00	Villalba.....	38	71.59
Culebra.....	80	29.93	Yauco.....	1,702	412.00
Dorado.....	200	50.00	Special schools:		
Fajardo.....	1,400	500.00	College of Agriculture, Mayaguez.....	187	65.00
Guainabo.....	57	56.60	University of Porto Rico, Rio Piedras.....	93	23.25
Guánica.....	680	170.00	Practice school, Rio Piedras.....	272	83.67
Guayama.....	2,567	789.26	Boys' Charity School, Santurce.....	275	104.00
Guayanilla.....	875	200.00	Girls' Charity School, Santurce.....	175	47.69
Gurabo.....	1,069	267.25	Private schools:		
Hatillo.....	1,247	198.19	Academia Catolica.....	80	21.00
Hormigueros.....	130	32.50	St. Thomas Aquinas.....	60	15.00
Humacao.....	1,916	479.30	Robinson Orphanage.....	46	21.00
Isabela.....	464	116.19	Colegio de la Inmaculada.....	26	6.50
Jajuya.....	263	65.25	Our Lady of the Rosary.....	57	15.05
Vieques.....	693	172.72	Colegio Catolico, Arecibo.....	268	67.00
Yabucoa.....	1,300	325.00	Colegio Catolico, Caguas.....	262	107.00
Juana Diaz.....	500	132.01	Instituto José de Diego.....	61	27.50
Juncos.....	1,200	307.00	St. John's School.....	56	60.75
Lajas.....	200	50.00	Colegio Puertorriqueño de Niñas.....	125	30.50
Lares.....	507	156.75	Liceo Ponceño.....	154	166.70
Las Marias.....	178	53.00	Methodist Episcopal Mission School, Albionito.....	50	17.50
Las Piedras.....	474	118.50	Moozo's Academy.....	91	88.06
Lotza.....	244	166.51	E. L. Thompson.....		5.00
Luquillo.....	274	68.50	Total.....	68,013	21,501.22
Manati.....	861	202.43			
Mariaco.....	290	140.50			
Maunabo.....	196	96.00			
Mayaguez.....	2,107	626.75			
Moca.....	189	47.33			
Morovis.....	213	65.14			

## AMERICAN RED CROSS.

In addition to the activities in behalf of the junior Red Cross, many teachers have aided in the work of the Porto Rico Chapter of the American Red Cross, whenever it had local organizations.

During the second war-fund drive an effort was made to have all employees of the insular government give one day's pay as a special contribution to this fund. An appeal was sent to supervisors and teachers by the commissioner, urging them to make one more sacrifice in addition to those already made. In spite of the fact that one day's pay for teachers really represented two days' pay for the reason that they are paid only for 180 days, and in spite of the fact that this contribution was made from the last check sent them before vacation, they responded generously and patriotically. Of 2,649 teachers in the service at the close of the year, 2,587 made this special contribution.

The office staff of the department of education, the supervisory force and employees of the university, and the teachers of the public schools gave a total of \$6,611.48 as a special additional contribution to the second war fund.

## LIBERTY LOAN CAMPAIGNS.

The schools have taken an active part in the Liberty Loan campaigns for promoting the sale of Liberty bonds. They have participated in all the civic parades organized for this purpose, and in a few towns the propaganda for the sale of bonds was directly in the hands of teachers and school boards, who conducted public meetings in which the schools participated. A total of 705 Liberty bonds were bought: By the office and supervisory force, 104; by teachers, 522; by schools, 79. Good records for the purchase of Liberty bonds were made by the supervisors and teachers of the Fajardo, Ponce, and Yauco districts.

## SCHOOL MEN IN MILITARY SERVICE.

During the past year the department of education and the University of Porto Rico have lost many of their best men by their entering the military service. Not all of these men were necessarily of military age. A number who were over age entered training camps for reserve officers, receiving commissions upon graduation. Not only have these men been given up gladly with such leave of absence as the demands of the service permitted, but able-bodied supervisors and teachers were urged to enter training camps for reserve officers, in order to assist the military authorities in securing men of education and personal qualities of leadership as officers for the Porto Rican contingent.

Since the United States entered the war and up to the writing of this report, 233 men have entered the military service. Of this number, 10 were supervisors of schools; 4 instructors in the university; 7 instructors in the College of Agriculture and Mechanic Arts; 5 school board members; 2 administrative officers in the university; 4 high-school principals; 10 teachers of high school academic subjects; 18 manual training teachers; 14 teachers of English; 2 special teachers of agriculture; 48 English graded teachers, and 109 rural teachers.

Of the aforementioned number, 3 now hold commissions as captains, 10 as first lieutenants, 62 as second lieutenants, 147 are noncommissioned officers or privates, 2 are in the Aviation Service, 1 in the medical service, 1 in the Navy, 1 deceased, 2 on special duty, and in the case of 4, their present rank and location are unknown.

To the above number should be added 63 students of high and continuation schools, of whom 4 have received commissions as first lieutenants and 16 as second lieutenants. The remaining 43 are privates.

## NATIVE INDUSTRIES.

In addition to the courses in home economics and manual training which have become a regular part of the urban course of study, plain sewing for girl pupils was taught in the urban schools of 27 municipalities and in certain rural schools of 60 other municipalities. While in the greater number of rural schools both boys and girls were required to do garden work, in quite a few there were not enough implements nor sufficient land available to employ both sexes and in all such cases the girls spent one full period each day in sewing while the boys were at work in the garden. In very many instances women teachers devoted an hour after the close of the regular daily session to the teaching of sewing, embroidery, and lacework. No additional pay was received for this work.

The teaching of native industries in the schools is a question of momentous importance in connection with the future welfare of the people. In many of the interior districts there is an absolute lack of gainful occupations during the greater part of the year. In certain sections no opportunity is ever offered to the poorer people, to the women especially, to earn a little money wherewith to buy some of the necessities of life. The teaching of these industries can not, however, be undertaken in a general and systematic way until such time as the legislature finds it possible to provide special funds for the work. The need of expert supervisors and teachers is especially necessary. This need has been recognized by a number of school boards. Special instructors in hat making, sewing, and embroidery have been employed by some of the boards with good results. But very few of them have funds available for this purpose. An additional preliminary step that has to be taken is to increase the available supply of raw materials. In certain sections the hat palm and textile plants are plentiful. In other sections, however, they are not to be had. In a number of towns where plans were made during the year for instruction in hat making they had to be abandoned owing to the difficulty in securing raw materials. It will therefore be necessary to carry out a systematic campaign for the cultivation of palm and textile plants on a wider scale before a number of native industries can become generalized.

School boards, supervisors, and teachers have been urged to go ahead in this matter independently. The importance of the step is not, however, as yet generally recognized. In but 37 of the municipalities have any efforts been made in this direction. In 38 municipalities absolutely nothing has been done. It is gratifying none the less to report on the results already accomplished in approximately one-half of the districts.

Many of the products of the pupils' industry have found a ready market in the island. In order to command a market in the United States, however, these products will have to be standardized. This department realizes that this is a field to which increased attention will have to be given in coming years, as soon as the legislature makes the necessary funds available.

The following summary shows the nature and extent of the work that is being done:

Kind of industry.	Number of municipalities in which it is being taught.
1. Straw hats .....	11
2. Basket making .....	26
3. Rope making .....	8
4. Hammocks .....	4
5. Mats and carpets .....	8
6. Straw handbags .....	2
7. Picture frames .....	1
8. Brooms .....	4
9. Bead curtains .....	6
10. Palm-leaf fans .....	3
11. Wooden toys .....	1
12. Eguera toys .....	1
13. Fish traps .....	1
14. Lace .....	5
15. Drawn work .....	4
16. Embroidery .....	3

#### SCHOOL LIBRARIES.

Urban school libraries are maintained in 62 municipalities. They report a total of 32,950 volumes, an average of 530 per library. Unfortunately, many of the books which were acquired or donated in years past are not in the least adapted to the needs and interests of school children. Since the department issued an official library guide, however, with the added regulation that all books purchased from school-board funds should be selected from the guide, these libraries are gradually assuming a character and an appearance more in harmony with their purpose. A total of 2,435 new books have been bought for the town libraries during the year at a total cost of \$1,218.55. A considerable number of books have also been donated.

Thirty-four municipalities report the maintenance of rural school libraries. The total number of books is 5,097, an average of 150 books per municipality. Of these, 1,137 have been bought during the year and are of a nature that will meet the needs of rural pupils.

Efforts to establish rural school libraries in the past have invariably fallen short of expectations. The well-meant, but sporadic, efforts of individual teachers and supervisors have failed, owing to lack of sufficient funds for the purchase of books and equipment, to the difficulties of transportation, and to the scarcity of appropriate books in the Spanish language to interest country readers. Furthermore, the long prevailing practice of building up these libraries out of discarded textbooks, generally in English, a language with which the country population is not familiar, has unfavorably reacted on the interest of school boards and teachers.



## SCHOOL LUNCHES.

The movement to provide poor school children with noonday lunches started some years ago through the initiative of individual teachers and the cooperation of public-spirited men and women. The movement has grown to encouraging proportions, although it is still wholly supported by private funds. While it has not been possible to devote any public money to this work, the department is in entire sympathy with it, and it has done what it could to encourage and to further extend it. A law was enacted by the legislature at its last session to appropriate public funds for the extension of the school lunch movement. Unfortunately the scarcity of funds available for school purposes will nullify the good wishes of the legislature for the present, as other needs of the schools, of an even more imperative nature, will have to be given preferent attention.

Wherever it has thus far been possible to provide poor children with noonday lunches the results have been most satisfactory. Supervisors and teachers report a better attendance and a higher grade of individual work. The "comedor escolar" insures the undernourished child at least one fairly well balanced meal every school day.

In one school district a rural school provides noonday meals for its poor pupils. It is to be hoped that this movement will be given special attention in the country districts in conjunction with the vegetable gardens which are being maintained in almost all the country schools. In well-nigh all the barrios there are parents' associations, and these will be found more than willing to cooperate with the teachers in this important work.

The following summary shows the extent of the movement in the island schools. The relatively low average cost per meal in many towns is explained by the fact that merchants and private individuals often make large donations in foodstuffs and equipment as well as in money. In many instances teachers have been able to pay a large proportion of the cost themselves, through various activities of theirs. In the town of Lares, for instance, the principal of the schools leased the town theater and ran a moving-picture show throughout the year for the exclusive purpose of providing funds for the lunches. This accounts for the fact that the Lares teachers were able to feed on the average 50 pupils each day at a cost to the community of less than 1 cent per pupil per day.

Town.	When organized.	Number of days lunches were served.	Average number of pupils fed each day.	Total cost.	Cost per pupil per day (cents).	Cash balance on hand June 30, 1918.
San Juan .....	October, 1916 .....	156	176	\$1,729.00	6.2	\$634.00
Humacao .....	do .....	174	52	425.00	4.7	15.00
Yabucoa .....	September, 1915 .....	161	60	348.40	4	75.00
Juncos .....	October, 1916 .....	145	75	500.00	4.5	27.79
Caguas .....	January, 1917 .....	157	71	585.10	5.6	1,100.00
San Lorenzo .....	do .....	160	30	240.00	5	.....
Guayama .....	January, 1918 .....	75	125	500.00	5.9	250.00
Ponce .....	October, 1916 .....	149	25	269.20	8.1	40.00
Guayanilla .....	September, 1917 .....	150	25	75.00	2	.....
Pedueñas .....	do .....	178	30	180.00	3.2	.....
San German .....	April, 1916 .....	160	80	450.00	3.7	168.99
Rincon .....	January, 1917 .....	155	25	174.95	4.5	.....
Aguada .....	do .....	99	15	80.00	5.3	10.00
Lares .....	February, 1917 .....	161	60	50.00	.6	34.55
San Sebastian .....	November, 1916 .....	154	45	243.58	3.5	.....
Arecibo .....	March, 1917 .....	142	30	568.00	5	100.00
Manati .....	October, 1912 .....	170	10	.....	.....	.....
Toa Baja .....	January, 1918 .....	79	15	59.25	5.4	.....
Bayamon .....	November, 1917 .....	90	20	57.95	3.2	.....
.....	.....	.....	1,009	6,602.43	6.5	2,455.33

## SCHOOL BANDS.

Instrumental music plays an important part in the social life of the people. With counted exceptions every town has its band which plays at all public exercises and gives regular concerts on the plaza. Musicians are therefore in demand, and anyone able to play an instrument finds a ready opportunity to earn some extra money. Many of our pupils have been able to support themselves through school as a result of their musical ability. This will in part explain the very prevalent wish on the part of school boards and of the people in general for the establishment of school bands. In addition to the opportunities it affords pupils to earn money, the movement has, of course, distinct educational value.

The following summary gives the present status in regard to school bands:

Towns having duly organized school bands .....	24
Total number of instruments .....	562
Average per town .....	23
Total number of pupils who received instruction .....	799
Average per town .....	33
Total amount paid for instructors' salaries .....	\$7,173.00
Maximum monthly salary of instructors .....	\$60.00
Minimum monthly salary .....	\$15.00
Average salary .....	\$33.21
Amount spent for materials during the year .....	\$468.25

The number of hours of instruction per week varies from 5 to 20. The average for the island is 9.

The following school bands have been especially successful and all of them give regular concerts on the plaza on Sundays and holidays: Comerio, Santa Isabel, Cabo Rojo, Ponce, Salinas, Juana Diaz, Maricao, and Vega Alta.

Only three of the bands are uniformed: Comerio, Ponce, and San Juan.

The principal difficulty is the restricted amount of funds available for equipment and for instructors' salaries and, also, the lack of competent instructors. For the above reasons a number of towns have had to discontinue their school bands.

#### DEPARTMENT PUBLICATIONS.

The department issued 96 circular letters dealing with administrative matters. The following bulletins have been published during the year:

The Course of Study in Moral and Civic Training, Volumes I and II, by Susan D. Huntington. (Vol. I in Spanish and Vol. II in English.)

Course of Study in Manual Arts, by Frank S. Pugh.

Teachers' Manual for Second Grade Oral English, by Joseph C. Morin.

Bulletin of General Information on Positions Open to American Teachers.

The Porto Rico School Review, published under the auspices of the department of education and the Porto Rico Teachers' Association, was issued monthly during the school year and replaces to a large extent the bulletins heretofore issued in pamphlet form. The Review has developed into a standard professional magazine and serves as a forum for discussion and as a medium for informing the teaching force of matters of educational importance.

#### TEACHERS' MEETINGS AND INSTITUTES.

In view of the relatively large proportion of new teachers who have come into the service during the past year, due to the increase in the number of schools and due also to the fact that many of the more experienced teachers left school work as a result of war conditions, supervisors have everywhere been called upon to take special measures tending to meet this situation. This has called for more frequent and longer visits on the part of the supervisors and everywhere much added importance has been given to such upbuilding factors as teachers' meetings and demonstration classes.

Of teachers' meetings a total of 327 are reported to have been held during the year. This does not include the very many grade or group meetings which have been held at stated intervals in practically all districts. Of these 327 meetings, an average of 7 per district, 166 were graded teachers' meetings, 87 were for the special benefit of rural teachers, and 74 were general district meetings.

The following subjects are illustrative of the practical nature of the themes discussed:

Purpose and value of seat work.

Types of seat work.

Teaching of English and Spanish in the primary grades.

English pronunciation.

Moral and civic training.

Securing the cooperation of parents.

The hour plan.

Teaching children how to study.

Socializing the recitation.

Motivation of school work.

Activities connected with the war received their full share of attention. Food conservation and extension of the food supply, school gardens, the American Red Cross, the junior Red Cross, Liberty bond campaigns, and War Savings Stamps were common topics of discussion and in all the districts special meetings were devoted to these subjects.

Series of practice or demonstration classes have been held in many of the districts for the special benefit of weak or inexperienced teachers. Another practice which has been followed to a much greater extent than in the past has been that of allowing weak teachers a visiting day. In many instances teachers have shown a readiness to undergo the expense and trouble of visiting some of the larger educational centers, away from their respective towns, to observe the work of the more successful teachers and to familiarize themselves with certain experiments that were being conducted in educational lines.

One general teachers' institute was held at Aibonito on January 30 and February 1 and 2. This institute was attended by the teachers of five municipalities: Aibonito, Barranquitas, Cayey, Cidra, and Coamo. Other institutes somewhat more local in character were held at Fajardo, Manati, and Maricao. At all of these meetings representatives from the department assisted the local supervisors. The nature of the meetings was constructive rather than corrective, as has been the practice in the past. Demonstration classes were given and certain subjects of the course of study received definite attention.

No funds were available for the payment of expenses connected with these institutes until the middle of the year, and after they were secured the many duties connected with war activities made it necessary to discontinue them.

#### PROFESSIONAL READING COURSES.

An organized effort has been made during the past three years to raise the professional standard of the teachers by providing them with a number of books which contained the best and latest ideas available on educational questions.

Reports received from supervisors all point to the unquestionable improvement which has been brought about in the general attitude and the efficiency of teachers as a result of these reading courses. During the year just closed no insular funds have been available for the purchase of professional books. An appeal was therefore made to teachers to purchase the books indicated for the year's reading course out of their own funds. They responded readily. The books thus purchased will be available for reference during succeeding years and every teacher will thus have the nucleus of an individual professional library to which, it is hoped, each will add as his means will permit.

The books recommended for the year's reading course were as follows:

1. For rural teachers: Social Problems in Porto Rico, Fleagle Jean Mitchell's School.
2. For urban teachers from the first to the fourth grade: Motivation of School Work, Wilson and Wilson; A Schoolmaster of a Great City, Patri.
3. For urban teachers from the fifth to the eighth grade: Motivation of School Work, Wilson and Wilson; Education for Character, Sharp.
4. For high and continuation school teachers: Supervised Study, Hall-Quest; Education for Character, Sharp.
5. For school supervisors: Teaching Elementary School Subjects, Rapeer.

Unfortunately, owing to the unsettled shipping conditions the books did not arrive until late in the year and the prescribed reading course could not be completed in accordance with our schedule. These same books will therefore be studied and completed next year.

Numerous school boards have come to realize the needs of their teachers in the way of further professional study and preparation and they are now cooperating with the department by making provision in their annual budget for the purchase of professional books and magazines for the use of their teachers.

A small but constantly growing collection of professional books is now found in the office of every district supervisor. Standard professional magazines, such as Normal Instructor and Primary Plans, the Porto Rico School Review, Primary Education, and the Elementary School Journal have large numbers of subscribers among the teachers.

The readiness of teachers to make pecuniary sacrifices and their willingness to fall in with any suggestions tending to their professional improvement is a decidedly encouraging feature.

#### RATING OF TEACHERS.

At the close of the school year all the teachers in the active service in the schools of the island were classified according to efficiency of service, a modified form of the Boyce score card being used. Classifications range from E, the highest, to P, the lowest. The latter classification results in the cancellation of the teachers' license and his removal from service.

The following is a summary of the classifications made:

Classification.	Urban teachers.	Rural teachers.	Total.
F.....	215	31	246
G.....	825	1,077	1,912
F.....	67	414	481
P.....	2	8	10
	1,119	1,530	2,649

#### LEGISLATION.

During the first session of the Ninth Legislature of Porto Rico and during the special session of the Ninth Legislature of Porto Rico, the following bills affecting public instruction were enacted into laws:

1. An act to authorize school boards to pay the salaries of special teachers in schools of a technical character.

2. An act to provide text books for certain students in the high schools of Porto Rico.

3. An act to regulate the granting of life certificates to the teachers of Porto Rico, and for other purposes.

4. An act to create a pension fund for the teachers of Porto Rico, and for other purposes.

5. An act fixing the school year and salaries of school-teachers. The school year is extended to 10 months, divided into two semesters of 5 months each. The salary of graded teachers is fixed at \$60 and of rural teachers at \$40 per month.

6. An act to protect and extend school lunch rooms to all public schools.

7. A joint resolution directing the commissioner of education to allot additional teachers to certain municipalities; appropriating funds to pay their salaries, and for other purposes.

8. A joint resolution providing for the assignment of the charity schools of Santurce to the department of health.

9. An act to authorize the commissioner of education to issue temporary licenses to certain persons. The purpose of this act is to meet the shortage of regularly licensed teachers, due to the war situation.

10. An act to authorize the issuance of bonds of the people of Porto Rico to the amount of \$300,000 to provide funds for and to authorize the construction and equipment of a high-school building in the city of San Juan, the completion of the high school in the city of Ponce, and for other purposes.

11. A number of brief laws were also passed, making provision for the construction of school buildings in Barceloneta, Ceiba, Isabela, Naranjito, San German, San Sebastian, and Villalba, and for the enlargement, repair and completion of school buildings in Barros, Comerio, and Luquillo.

#### RULES AND REGULATIONS.

During the past year the regulation concerning contracts of certain married women was amended.

The commissioner of education also issued rules governing the selection of teachers in accordance with the terms of section 17 of the organic act. These rules provide that in selecting teachers for nomination to the commissioner of education and to fill vacancies existing for the ensuing school year, preference shall be given to those teachers who have served in the same municipality and in the same grade of school during the year immediately preceding and who have obtained a rating of not less than G-, unless such teachers do not desire to be appointed to the same municipality, or unless the positions they held are abolished. For the purpose of filling any remaining vacancy, a list of eligible candidates arranged on a merit basis shall be prepared by school boards on the recommendation of the respective supervisors of schools. The purpose of these rules is to protect good teachers in their positions, to give preference to properly qualified teachers in filling vacancies, and at the same time permit school boards to replace teachers with a rating of lower than G- with others who have a higher rating.

## SCHOOL BOARD ACTIVITIES.

The school boards of the 75 municipalities received a total of \$539,108.49 from the various sources of revenue classified as the school fund, school tax, interest on bank deposits, repayments and gifts. Adding to this amount \$30,000 granted to the school board of Cayey as a loan fund for the erection of a school building in that city, the amount actually paid over in cash to school boards is \$569,108.49. To this amount should be added \$107,127.48 due the school boards but which was retained by the treasurer of Porto Rico for the purpose of covering the annual amortization, including capital and interest, on loans granted certain school boards for the purpose of erecting school buildings. Therefore, the total revenues of school boards during the past fiscal year amounted to \$676,235.97 including \$13,099.32 interest paid by banks upon amounts deposited by school boards.

On the other hand, after school boards had rendered their final and supplementary accounts for the fiscal year ending June 30, 1917, there remained a cash balance on hand in the several banks, amounting to \$528,867.58, which, added to the total revenue of \$676,235.97, gives a grand total of \$1,205,103.55 at the disposal of the school boards for their several expenditures for the fiscal year 1917-18.

During the past fiscal year the school boards have spent a total of \$730,947.09 covering the following items: Rent of school buildings; salaries of employees; office expenditures for school boards' and supervisors' offices; premiums on bonds given by school treasurers; school equipment, including the necessary expenses for supporting the work in manual arts, home economics, and agriculture; athletic apparatus and supplies; insurance on school buildings and equipment; light; water; telephone service; school festivals; conferences; printing; repairs and construction of buildings; books, papers, and magazines for school libraries; supplies for school bands; scholarships for certain rural pupils in urban schools, and scholarships for students taking the rural course in the normal department of the University of Porto Rico.

Adding to the foregoing expenditures the amount retained by the treasurer of Porto Rico both for capital and interest on loan funds, amounting in all to \$107,127.48, the total expenditures of school boards amounted to \$838,074.57. Subtracting the total expenditures, \$838,074.57, from the total amount at the disposal of school boards, \$1,205,103.55, there remained a cash balance on hand in the banks of Porto Rico on June 30, 1918, the sum of \$367,028.98.

This cash balance of \$367,028.98 includes the sum of \$78,857.17 representing loan funds, and therefore the difference, or \$288,171.81, represents the regular income of school boards, which is the largest cash balance derived from the regular sources of revenue since the system of school board accounting was established, in spite of the fact that the expenditures of the year exceeded those of the previous years by about \$200,000.

During the past fiscal year school boards have spent the sum of \$98,560.83 on equipment for common schools, including equipment for work in manual arts, home economics and agriculture; and on athletic apparatus and supplies the sum of \$2,589.94. For rent of school buildings there was expended the sum of \$116,188.57 and for salaries of employees the sum of \$110,736.27. In this sum are included the salaries of certain additional teachers that were requested by the school boards of Guanica, Salinas, Santa Isabel, Aguada, Arecibo, Caguas, Carolina, Lares, Maricao, Rio Grande, Rio Piedras and Yabucoa. For incidental expenses school boards paid out \$10,973.51 and for general expenses, including repairs of buildings, \$66,340.68. In the construction of school buildings there was expended the sum of \$325,557.29 from loans and regular funds.

An attempt was made to enter upon an extensive building program involving a total expenditure of \$1,000,000, but because of the inability of the insular treasury to grant loans to school boards and because of conditions brought about by the world war, it was impossible to carry out this plan. Only such construction work was undertaken as could be effected with the means at hand and in cases of indispensable need. In spite of these difficulties, six school buildings with a total of 64 schoolrooms in the urban zone, and 20 buildings with a total of 27 rooms in rural barrios were completed. Among these, special mention should be made of the Federico Degetau Consolidated Rural School at Santana, Arecibo, containing 5 classrooms with ample facilities for cooking and work in agriculture, and also of a concrete 4-room building at Aguirre, and of a 2-room concrete building in barrio Canos, Guanica, all in the rural zone. Of school buildings in the urban zone which have been completed or are nearing completion, mention should be made of an 8-room concrete building in Gurabo, a 12-room concrete building in Cayey, and a handsome 14-room brick building at stop 18½ in Santurce, with ample facilities for home economics, manual arts, and night schools. Special mention should be made of the best example of school architecture thus far produced in Porto Rico, namely, the Roman Baldorioty de Castro Graded and Techni-

cal School, erected at San Francisco Plaza, San Juan, at a cost of nearly \$200,000. From the standpoint of appearance, utility, and sanitary arrangements, especially as to light and ventilation, this building has no rival in Porto Rico. It contains offices for the school board, the supervisor of schools of the San Juan district and the principal, 18 classrooms, a large study hall accommodating 900 persons, and ample facilities for carrying on vocational work for both men and women. Nearly all of the space on the first floor is devoted to shops for boys and men who may be enrolled in the day and evening classes.

## SUMMARIZED STATEMENT OF SCHOOL BUILDINGS AND SITES

1. Total number of buildings completed during the year:
  - (a) Urban: Six buildings with 64 rooms, including an 18-room graded and technical school in San Juan.
  - (b) Rural: Twenty buildings with 27 rooms.
2. Total number of buildings commenced during the year and now in course of construction:
  - (a) Urban: Five buildings with 24 rooms.
  - (b) Rural: Eight buildings with 10 rooms.
3. Total number of building projects, commenced in previous years and in course of construction during the present:
  - (a) Urban: Six buildings with 22 rooms.
  - (b) Rural: Nine buildings with 21 rooms.
4. Total number of sites acquired during the course of the year:
  - (a) Urban: Five sites.
  - (b) Rural: Twenty-seven sites.
5. Special enumeration of sites donated to school boards:
  - (a) Urban: Guanica, 1 site by municipality of Guanica; Morovis, 1 site by Sucesión Alonso del Río; Vega Alta, 1 site by municipality of Vega Alta.
  - (b) Rural: Barceloneta, 1 site by Plazuela Sugar Co.; Guanica, 1 site by José Claudio; Isabela, 1 site by Lino García Camacho; Jayuya, 1 site by Mejía & Armstrong; Juana Díaz, 1 site by Central Aguirre Co.; Naranjito, 1 site by Marcos Díaz; Rincón, 1 site by Lorenzo Vilhaneuva; Utuado, 1 site by Luis Gómez Rivera; Vega Baja, 1 site by Ramón de León Hernández; Villalba, 1 site by Teodoro Alonso.
6. Towns in which no school buildings of any kind have been erected since the American occupation.
  - (a) In urban centers: Ceiba, Luquillo, Juncos, Hormigueros, Jayuya, Barceloneta, Morovis, Dorado, and Guainabo.
  - (b) In rural districts: Loiza, Fajardo, Luquillo, Hormigueros and Rincón.

## RECOMMENDATIONS.

For many years to come the material resources of the people of Porto Rico will not be sufficient to extend and support the present school system in a manner adequate to solve fully the educational problems of Porto Rico. More and better schools installed in better buildings specially constructed and provided with modern furniture and equipment demand an expenditure of money that is not and will not be available from insular revenue for many years to come.

The rural school course of study should be extended from four to six years. If carried out, this change would involve the complete elimination of the double session plan, and at the same time it would relieve the rural teacher of the drudgery of doing the work of two persons, while receiving the only too meager remuneration of one. Present resources are entirely inadequate to bring about this change with the result that far too many children in the country receive the semblance rather than the substance of an elementary education.

The low scale of salaries paid teachers has caused hundreds of them to leave the profession for more remunerative employment. Thus we behold the strange spectacle of several thousand persons in Porto Rico with teachers' licenses, and at the same time many schools remain vacant for want of persons who are willing to take charge of them at the salaries paid.

The matter of securing teachers from the United States has become increasingly difficult from year to year and at present it is well nigh impossible to get teachers for certain positions at the present salaries.

Porto Rico demands outside help either from Federal or private resources, or from both, to extend and support her school system. Official steps should be taken to secure this aid.

The amount of money appropriated for the support of high schools is far from sufficient; yet by the terms of the appropriation act the commissioner of education is compelled to maintain high schools in eleven municipalities.

The legislature should commit itself to a definite policy concerning secondary education. One of three courses may be pursued:

1. High-school instruction may be abolished altogether.
2. Adequate provision may be made for the support of the eleven high schools now in operation.
3. The funds that may be considered available may be expended on a limited number of high schools, three or four instead of eleven.

TABLE I.—*Directing and supervising officers, 1917-18.*

Paul G. Miller, commissioner of Education.  
 Carey Hickie, assistant commissioner of education.  
 Ward C. McCroskey, secretary.  
 Geo. H. Harriman, chief, division of property and accounts.  
 A. González Font, chief, division of school board accounts.  
 M. A. Ducont, general superintendent of schools.  
 ———, general superintendent of schools.  
 José González Glinorio, supervisor of Spanish.  
 A. J. Sykes, supervisor of agriculture.  
 Grace J. Ferguson, supervisor of home economics.  
 Frank S. Pugh, supervisor of manual training.

UNIVERSITY OF PORTO RICO.

Paul G. Miller, chancellor.  
 Chas. W. St. John, dean, Rio Piedras departments.  
 Ralph S. Garwood, dean, College of Agriculture and Mechanic Arts, Mayaguez.

SCHOOL DISTRICTS AND SUPERVISORS.

SAN JUAN..... George V. Keelan.  
 RIO PIEDRAS-TRUJILLO.....  
 ALTO..... Cecil E. Stevens.  
 CAROLINA..... Beatriz Lassalle.  
 RIO GRANDE-LOIZA..... Wm. F. Littlefield.  
 FAJARDO - CEIBA - LU-  
 QUILLO..... C. E. Miner.  
 NAGUASO-VIQUES..... Valeriano Flores.  
 HUMACAO-LAS PIEDRAS..... M. D. Rice.  
 YABUCCA-MAUNABO..... Bernardo Huyke.  
 ARROYO-PATILLAS..... Ismael Maldonado.  
 JUNCOS-GURABO..... Celestino Benítez.  
 CAGUAS-SAN LORENZO..... G. Salés Solá.  
 GUAYAMA..... C. Torres Reyes.  
 SALINAS-SANTA ISABEL, Juan E. Castillo.  
 CALEY-CIDRA..... M. Negrón Collazo  
 COMERIO - AGUAS.....  
 BUENAS-NARANJITO..... Samuel D. W. Mills.  
 AIBONITO - BARRANQUITAS..... Servando Rabalme.

BARROS..... Don W. Snow.  
 COAMO..... Harold S. Corlett.  
 JUANA DIAZ-VILLALBA..... Chas. J. Kelley.  
 PONCE..... John P. Blanco.  
 GUAYANILLA-PENUELAS..... F. Rodríguez López.  
 YAUCO-QUANICA..... Francisco Vizcarondo.  
 SAN GERMAN - SABANA  
 GRANDE..... J. U. McGuire.  
 CABO ROJO-LAJAS..... A. H. Lynch.  
 MAYAGUEZ-HORMI-  
 GUEROS..... R. B. Barlow.  
 MARICAO-LAS MARIAS..... Pedro P. Arán.  
 A N A S C O - R I N C O N -  
 AGUADA..... R. H. Spicer.  
 LARES..... R. A. Segarra.  
 SAN SEBASTIAN..... Herminio Rodríguez.  
 AGUADILLA-MOCA..... Carmen Gómez (Acting).  
 ISABELA-QUEBRADILLAS..... C. Rivera Utré.  
 Utuado..... José C. Rosario.  
 AJUNTAS-JAYUYA..... Zolito Gracia.  
 CAMUY-HATILLO..... Juliet A. Casey.  
 ARECIBO..... M. G. Nin.  
 MANATI-BARCELONETA..... Joseph C. Morin.  
 CIALES..... Luis Padilla.  
 VEGA BAJA-VEGA ALTA..... Victor M. Suárez.  
 COROZAL-MÓROVIS..... Francisco Gastambide.  
 TOA BAJA-TOA ALTA.....  
 DORADO..... José B. Fontanes.  
 BAYAMON-GUAINABO..... E. J. Bunting.

HIGH-SCHOOL PRINCIPALS.

San Juan..... J. B. Hagberg.  
 Ponce..... H. A. Martin.  
 Mayaguez..... Sara M. Williams.  
 Arecibo..... J. H. Axtmayer.  
 Humacao..... A. E. E. Herger.  
 Fajardo..... Santiago Veve.  
 Caguas..... Florence Sprague.  
 Guayama..... George S. Hennessy.  
 Yauco..... Facundo Sánchez (Acting).  
 Aguadilla..... Hatuey Díaz Baldoroty.  
 Bayamon..... Chas. P. Cassidy.

TABLE II.—*Summary of statistics for the school year 1917-18.*

Number of different pupils enrolled in schools under the department of education, classified by color and sex:

White—		
Male.....		64,165
Female.....		49,297
Total.....		113,462
Colored—		
Male.....		15,898
Female.....		12,229
Total.....		28,127
White and colored—		
Male.....		80,063
Female.....		61,526
Total.....		141,589

Number of different pupils enrolled in each kind of school under the department:

High schools.....	2,573
Continuation schools.....	773
Total secondary schools.....	3,346
Elementary urban schools.....	50,060
Rural schools.....	84,370
Night schools.....	3,613
Total in schools under the department.....	141,589

## Number enrolled in the University of Porto Rico:

College of Liberal Arts.....	14
College of Law.....	81
College of Pharmacy.....	15
Normal department.....	97
Two-year course for rural teachers.....	135
College of Agriculture and Mechanic Arts—	
Collegiate course.....	77
Subcollegiate course.....	127
Summer school.....	156
Counted twice.....	360
Practice school.....	11
High school.....	249
	226
	216
<b>Total in the University of Porto Rico.....</b>	<b>1,142</b>

Number enrolled in charitable and correctional schools.....	645
Number enrolled in private schools.....	7,243

**Total enrolled in all schools in Porto Rico..... 149,979**

## Average number belonging in schools under the department of education:

High schools.....	2,206
Continuation schools.....	636
<b>Total secondary schools.....</b>	<b>2,842</b>
Elementary urban schools.....	43,422
Rural schools.....	67,239
Night schools.....	2,186
<b>Total.....</b>	<b>115,689</b>

## Average daily attendance in schools under the department of education:

High schools.....	2,097
Continuation schools.....	596
<b>Total secondary schools.....</b>	<b>2,693</b>
Elementary urban schools.....	41,286
Rural schools.....	60,608
Night schools.....	1,854
<b>Total.....</b>	<b>106,441</b>

Length of school year in schools under the department of education, 36 weeks, or 175 days, exclusive of holidays (in night schools, 20 weeks).

## Number of teachers (teaching positions) in schools under the department of education:

White—	
Male.....	723
Female.....	1,507
<b>Total.....</b>	<b>2,230</b>
Colored—	
Male.....	186
Female.....	299
<b>Total.....</b>	<b>485</b>
White and colored—	
Male.....	909
Female.....	1,806
<b>Total.....</b>	<b>2,715</b>
Teachers in high schools.....	112
Teachers in continuation schools.....	54
<b>Total secondary.....</b>	<b>166</b>
Teachers in elementary urban schools.....	1,061
Teachers in rural schools.....	1,468
<b>Total under department of education.....</b>	<b>2,715</b>

Teachers in the University of Porto Rico.....	79
Teachers in charitable and correctional institutions.....	26
Teachers in private schools.....	246
Number of buildings in use for schools during the year:	
Owned by the people of Porto Rico.....	540
Rented.....	1,172
Estimated value of all insular school buildings.....	\$2,309,528.16
Rental value of all other buildings.....	116,198.87
<b>Total expenditures for school purposes during the year ending June 30, 1918.....</b>	<b>2,365,280.90</b>
By school boards.....	780,947.00
By insular government.....	1,634,312.99
Department of education.....	1,458,987.74
University of Porto Rico.....	175,236.25



TABLE III.—*Enrollment, number belonging, attendance, and percentage of attendance for the island and municipalities.*

Subjects.	Porto Rico.	San Juan.	Rio Piedras.	Trujillo Alto.	Carolina.	Rio Grande.	Locha.
<b>Enrollment under department of education:</b>							
Enrollment 1917-18.....	141,589	6,972	2,467	938	2,108	1,732	1,851
Enrollment 1916-17.....	150,352	6,951	2,741	1,098	2,065	1,789	1,925
<b>Secondary schools—</b>							
High.....	2,573	688					
Continuation.....	773		113		29	43	
Elementary urban schools.....	50,060	6,051	850	214	507	423	475
Rural schools.....	84,570		1,494	698	1,447	1,232	1,322
Night schools.....	3,613	233	20	26	35	34	59
<b>Average number belonging:</b>							
Pupils belonging, 1917-18.....	115,689	6,108	2,109	692	1,710	1,487	1,532
Pupils belonging, 1916-17.....	126,693	5,924	2,470	958	1,769	1,485	1,659
High schools.....	2,206	609					
Continuation schools.....	636		102		28	35	
Elementary urban schools.....	43,422	5,368	784	172	514	401	403
Rural schools.....	67,239		1,210	498	1,143	1,029	1,093
Night schools.....	2,186	131	13	22	25	22	36
<b>Average daily attendance:</b>							
Average attendance, 1917-18.....	106,441	5,891	2,029	596	1,591	1,323	1,425
Average attendance, 1916-17.....	116,779	5,566	2,303	870	1,633	1,363	1,554
High schools.....	2,097	585					
Continuation schools.....	596		97		26	33	
Elementary urban schools.....	41,286	5,184	753	145	494	379	371
Rural schools.....	60,608		1,169	434	1,050	891	1,027
Night schools.....	1,854	122	10	17	21	20	34
<b>Attendance per 100 belonging:</b>							
Elementary urban schools.....	95.1	96.6	96.0	84.3	94.1	90.2	92.7
Rural schools.....	90.1		96.6	87.1	91.8	86.6	93.3

Subjects.	Fajardo.	Ceiba.	Luquillo.	Nagabo.	Vieques.	Humacao.	Las Piedras.	Yabucoa.
<b>Enrolled under department of education:</b>								
Enrollment, 1917-18.....	1,748	631	749	1,520	1,078	2,543	979	2,111
Enrollment, 1916-17.....	1,799	596	795	1,734	1,193	2,755	1,034	1,932
<b>Secondary schools—</b>								
High schools.....	100					118		
Continuation.....								24
Elementary urban schools.....	1,078	166	216	622	493	1,081	180	540
Rural schools.....	535	386	487	847	553	1,254	755	1,519
Night schools.....	35	79	46	51	39	90	44	26
<b>Average number belonging:</b>								
Pupils belonging, 1917-18.....	1,408	426	607	1,215	913	2,113	840	1,779
Pupils belonging, 1916-17.....	1,522	491	661	1,464	1,083	2,508	858	1,739
High schools.....	80					101		
Continuation schools.....								19
Elementary urban schools.....	912	125	189	535	415	936	152	458
Rural schools.....	391	257	408	649	457	1,018	698	1,284
Night schools.....	25	44	10	31	31	58	29	18
<b>Average daily attendance:</b>								
Average attendance, 1917-18.....	1,293	388	555	1,131	839	1,965	814	1,685
Average attendance, 1916-17.....	1,382	435	595	1,383	986	2,330	809	1,605
High schools.....	77					94		
Continuation schools.....								17
Elementary urban schools.....	851	117	177	506	394	878	144	447
Rural schools.....	344	233	370	596	417	947	644	1,205
Night schools.....	21	38	8	29	28	46	26	17
<b>Attendance per 100 belonging:</b>								
Elementary urban schools.....	93.3	93.6	93.6	94.6	94.9	93.8	94.6	97.6
Rural schools.....	88.0	91.0	90.7	91.8	89.3	93.0	95.4	93.8

TABLE III.—Enrollment, number belonging, attendance, and percentage of attendance for the island and municipalities—Continued.

Subjects.	Mau-nabo.	Arro-yo.	Patil-las.	Juncos.	Gura-bo.	Caguas.	San Lo-renzo.	Guay-ama.
Enrolled under department of education:								
Enrollment, 1917-18.....	854	956	1,293	1,410	1,317	3,562	1,645	2,644
Enrollment, 1916-17.....	781	1,071	1,529	1,532	1,508	3,783	1,704	2,740
Secondary schools—								
High.....						151		141
Continuation.....				20			9	
Elementary urban schools.....	215	472	380	615	365	1,273	455	1,338
Rural schools.....	589	449	885	733	913	2,041	1,121	1,068
Night schools.....	50	35	28	42	39	97	60	69
Average number belonging:								
Pupils belonging, 1917-18.....	609	780	1,070	1,138	1,075	2,903	1,372	2,234
Pupils belonging, 1916-17.....	621	888	1,263	1,261	1,179	3,330	1,356	2,351
High schools.....						114		121
Continuation schools.....				17			8	
Elementary urban schools.....	182	406	332	550	312	1,127	408	1,164
Rural schools.....	411	354	718	542	730	1,626	858	916
Night schools.....	16	20	20	20	33	36	30	43
Average daily attendance:								
Average attendance, 1917-18.....	533	703	928	1,019	955	2,735	1,207	2,100
Average attendance, 1916-17.....	547	792	1,158	1,148	1,068	3,090	1,261	2,224
High schools.....						109		114
Continuation schools.....				16			7	
Elementary urban schools.....	171	379	316	502	295	1,084	393	1,113
Rural schools.....	352	311	597	483	631	1,511	783	840
Night schools.....	10	13	15	18	29	31	24	33
Attendance per 100 belonging:								
Elementary urban schools.....	93.5	93.3	95.2	89.8	94.5	96.2	99.2	96.6
Rural schools.....	85.6	87.8	83.0	89.1	86.4	92.9	91.3	91.7

Subjects.	San-nas.	Santa Isabel.	Cayey.	Cidra.	Comerio.	Agua-s Buenas.	Naran-jito.	Albo-nito.
Enrolled under department of education:								
Enrollment, 1917-18.....	1,562	927	2,035	999	1,259	871	934	1,309
Enrollment, 1916-17.....	1,526	885	2,246	1,182	1,323	992	965	1,361
Secondary schools—								
High.....								
Continuation.....		10	51		16			15
Elementary urban schools.....	421	410	804	360	369	255	214	409
Rural schools.....	1,063	452	1,125	599	854	555	712	865
Night schools.....	78	55	55	40	20	58	8	20
Average number belonging:								
Pupils belonging, 1917-18.....	1,140	711	1,731	847	1,116	670	716	978
Pupils belonging, 1916-17.....	1,310	739	1,865	1,012	1,079	785	761	1,108
High schools.....								
Continuation schools.....		9	36		15			9
Elementary urban schools.....	338	305	745	321	315	215	181	356
Rural schools.....	768	367	918	501	766	426	529	598
Night schools.....	26	30	32	25	20	29	6	15
Average daily attendance:								
Average attendance, 1917-18.....	1,013	642	1,647	807	937	597	650	893
Average attendance, 1916-17.....	1,193	658	1,762	947	986	708	679	998
High schools.....								
Continuation schools.....		8	34		14			9
Elementary urban schools.....	306	283	711	307	290	197	168	342
Rural schools.....	677	327	876	478	615	376	477	530
Night schools.....	30	24	26	22	18	24	5	12
Attendance per 100 belonging:								
Elementary urban schools.....	91.1	94.4	95.4	95.6	92.1	91.1	92.8	96.1
Rural schools.....	88.1	89.1	95.4	95.4	80.3	88.2	90.2	88.6

TABLE III.—*Enrollment, number belonging, attendance, and percentage of attendance for the island and municipalities—Continued.*

Subjects.	Barran- quitas.	Barros.	Coamo.	Juana Díaz.	Villal- ba.	Ponce.	Guaya- nilla.	Peñue- las.
<b>Enrolled under department of edu- cation:</b>								
Enrollment, 1917-18.....	1,062	2,107	2,117	2,246	1,206	8,807	1,639	1,478
Enrollment, 1916-17.....	1,309	2,023	2,272	3,439	.....	9,970	1,749	1,531
<b>Secondary schools—</b>								
High.....						570		
Continuation.....			32	37			11	
Elementary urban schools.....	294	252	748	566	170	5,416	429	340
Rural schools.....	744	1,826	1,810	1,611	1,006	2,679	1,155	1,092
Night schools.....	24	29	27	32	30	142	44	46
<b>Average number belonging:</b>								
Pupils belonging, 1917-18.....	827	1,682	1,758	1,800	882	7,610	1,317	1,190
Pupils belonging, 1916-17.....	953	1,627	2,062	2,897	.....	8,329	1,379	1,281
High schools.....						479		
Continuation schools.....			29	29			8	
Elementary urban schools.....	259	223	639	450	112	4,719	358	287
Rural schools.....	554	1,446	1,078	1,297	723	2,284	937	877
Night schools.....	14	13	12	24	17	128	14	26
<b>Average daily attendance:</b>								
Average attendance, 1917-18.....	748	1,416	1,634	1,595	761	7,167	1,172	1,067
Average attendance, 1916-17.....	930	1,486	1,923	2,605	.....	7,935	1,264	1,167
High schools.....						458		
Continuation schools.....			26	26			7	
Elementary urban schools.....	248	214	609	410	98	4,546	321	276
Rural schools.....	490	1,194	989	1,141	649	2,052	834	793
Night schools.....	10	8	10	18	14	111	10	18
<b>Attendance per 100 belonging:</b>								
Elementary urban schools.....	95.7	96.0	95.3	91.1	87.5	96.3	90.0	96.1
Rural schools.....	88.4	82.6	91.7	87.8	89.6	90.0	89.0	90.4

Subjects.	Yauco.	Guan- ica.	San German.	Sabana Grande.	Cabo Rojo.	Lajas.	Maya- guez.	Hormi- gueros.
<b>Enrolled under department of edu- cation:</b>								
Enrollment, 1917-18.....	3,388	1,012	3,203	1,400	2,381	1,502	4,295	534
Enrollment, 1916-17.....	3,472	992	3,298	1,389	2,447	1,674	4,450	514
<b>Secondary schools—</b>								
High.....	104						256	
Continuation.....		17	50	45	57			
Elementary urban schools.....	904	655	848	596	914	329	2,294	142
Rural schools.....	2,318	257	2,211	710	1,347	1,146	1,622	345
Night schools.....	62	83	94	49	63	27	123	37
<b>Average number belonging:</b>								
Pupils belonging, 1917-18.....	2,840	812	2,675	1,121	1,968	1,270	3,396	446
Pupils belonging, 1916-17.....	2,998	764	2,944	1,161	1,996	1,302	3,585	449
High schools.....	79						228	
Continuation schools.....		6	43	36	45			
Elementary urban schools.....	779	537	738	496	752	279	1,921	129
Rural schools.....	1,926	215	1,826	562	1,122	977	1,184	294
Night schools.....	56	54	68	27	45	14	63	23
<b>Average daily attendance:</b>								
Average attendance, 1917-18.....	2,737	781	2,453	1,034	1,894	1,218	3,228	424
Average attendance, 1916-17.....	2,847	743	2,750	1,075	1,913	1,210	3,403	408
High schools.....	71						212	
Continuation schools.....		6	42	34	43			
Elementary urban schools.....	756	518	705	471	744	273	1,842	122
Rural schools.....	1,858	208	1,647	509	1,060	983	1,116	282
Night schools.....	52	49	59	20	47	12	58	20
<b>Attendance per 100 belonging:</b>								
Elementary urban schools.....	97.0	96.4	95.5	94.9	98.9	97.8	95.9	94.5
Rural schools.....	96.4	96.7	91.4	90.6	94.4	95.9	94.3	95.9

TABLE III.—*Enrollment, number belonging, attendance, and percentage of attendance for the island and municipalities—Continued.*

Subjects.	Mari- cao.	Las Marías.	Anasco.	Rincon.	Aguada.	Lares.	San Se- bastian.	Agua- dilla.
Enrolled under department of edu- cation:								
Enrollment, 1917-18.....	1,277	1,528	1,649	876	1,144	2,849	2,396	2,566
Enrollment, 1916-17.....	1,317	1,514	1,894	1,017	1,187	2,950	2,522	2,673
Secondary schools—								
High.....								122
Continuation.....	18		12			13		
Elementary urban schools.....	258	195	489	186	268	539	440	1,110
Rural schools.....	974	1,298	1,116	670	854	2,270	1,918	1,266
Night schools.....	27	35	32	20	22	27	38	68
Average number belonging:								
Pupils belonging, 1917-18.....	970	1,072	1,278	709	895	2,145	2,060	2,246
Pupils belonging, 1916-17.....	1,200	1,277	1,462	817	1,100	2,443	2,220	2,259
High schools.....								107
Continuation schools.....	16		10			10		
Elementary urban schools.....	220	169	404	161	232	455	389	996
Rural schools.....	715	883	843	528	653	1,669	1,641	1,098
Night schools.....	19	20	21	20	10	11	30	45
Average daily attendance:								
Average attendance, 1917-18.....	872	967	1,179	659	803	1,983	1,934	2,060
Average attendance, 1916-17.....	1,126	1,131	1,336	740	987	2,298	2,069	2,066
High schools.....								104
Continuation schools.....	15		9			8		
Elementary urban schools.....	212	169	386	158	216	441	372	917
Rural schools.....	631	790	765	483	579	1,525	1,534	996
Night schools.....	14	17	19	18	8	9	28	33
Attendance per 100 belonging:								
Elementary urban schools.....	96.4	94.6	95.5	98.1	93.1	96.9	95.6	92.1
Rural schools.....	88.2	89.5	90.7	91.4	88.6	91.3	93.4	90.7
Subjects.	Moca.	Isa- bela.	Quebra- dillas.	Ututo.	Ad- juntas.	Ja- yuya.	Camuy.	Ha- tillo.
Enrolled under department of edu- cation:								
Enrollment, 1917-18.....	1,094	1,882	1,037	3,984	2,022	1,388	1,579	1,376
Enrollment, 1916-17.....	1,146	2,019	1,192	4,492	2,365	1,525	1,623	1,562
Secondary schools—								
High.....								
Continuation.....			21	23				
Elementary urban schools.....	233	361	309	696	372	267	380	267
Rural schools.....	842	1,479	670	3,204	1,623	1,099	1,179	1,100
Night schools.....	19	42	37	61	27	22	20	9
Average number belonging:								
Pupils belonging, 1917-18.....	862	1,538	873	3,068	1,592	1,195	1,218	1,097
Pupils belonging, 1916-17.....	1,028	1,748	1,116	3,868	1,934	1,281	1,421	1,424
High schools.....								
Continuation schools.....			17	19				
Elementary urban schools.....	198	317	273	618	307	231	323	230
Rural schools.....	658	1,194	555	2,398	1,263	954	879	859
Night schools.....	6	27	28	33	22	10	16	8
Average daily attendance:								
Average attendance, 1917-18.....	784	1,405	812	2,723	1,378	1,091	1,090	1,061
Average attendance, 1916-17.....	915	1,577	1,026	3,459	1,719	1,171	1,311	1,312
High schools.....								
Continuation schools.....			16	18				
Elementary urban schools.....	187	265	262	587	280	217	301	216
Rural schools.....	592	1,067	512	2,088	1,072	867	776	836
Night schools.....	5	23	22	30	17	7	13	6
Attendance per 100 belonging:								
Elementary urban schools.....	94.4	93.1	95.9	94.5	94.1	93.9	93.2	95.2
Rural schools.....	90.0	91.0	92.3	87.1	84.1	90.9	88.2	87.3

TABLE III.—*Enrollment, number belonging, attendance, and percentage of attendance for the island and municipalities—Continued.*

Subjects.	Are-cibo.	Ma-nati.	Barce-loneta.	Claes.	Vega Baja.	Vega Alta.	Coro-ral.	Moro-vis.
<b>Enrolled under department of education:</b>								
Enrollment 1917-18.....	5,247	1,965	1,037	2,063	1,819	976	1,557	1,454
Enrollment 1916-17.....	5,316	2,209	1,176	2,133	1,860	1,260	1,656	1,660
<b>Secondary schools—</b>								
High.....	228	42			42		11	
Continuation.....				12	534	264	278	247
Elementary urban schools.....	1,444	732	388	412	534	264	278	247
Rural schools.....	3,462	1,124	618	1,589	1,193	682	1,239	1,160
Night schools.....	113	67	31	50	50	30	29	38
<b>Average number belonging:</b>								
Pupils belonging 1917-18.....	4,334	1,552	790	1,513	1,534	853	1,317	1,156
Pupils belonging 1916-17.....	4,617	1,914	868	1,676	1,591	864	1,337	1,333
High schools.....	202							
Continuation schools.....		29		11	41		9	
Elementary urban schools.....	1,286	635	334	362	472	237	257	209
Rural schools.....	2,772	855	448	1,109	995	592	1,035	923
Night schools.....	74	33	8	31	26	24	16	24
<b>Average daily attendance:</b>								
Average attendance, 1917-18.....	3,877	1,413	723	1,350	1,340	763	1,141	1,086
Average attendance, 1916-17.....	4,098	1,754	788	1,504	1,408	773	1,184	1,209
High schools.....	194							
Continuation schools.....		28		11	38		8	
Elementary urban schools.....	1,207	601	307	341	435	224	247	206
Rural schools.....	2,406	759	406	974	847	519	875	857
Night schools.....	70	25	7	24	20	20	11	23
<b>Attendance per 100 belonging:</b>								
Elementary urban schools.....	93.9	94.6	91.9	94.2	92.2	94.5	92.5	99.9
Rural schools.....	86.8	88.7	91.3	87.8	85.1	87.7	84.5	92.8

Subjects.	Toa Baja.	Toa Alta.	Do-rado.	Bayamon.	Guay-nao.	Cule-bra.
<b>Enrolled under department of education:</b>						
Enrollment 1917-18.....	1,006	1,352	680	3,442	886	182
Enrollment 1916-17.....	1,037	1,357	759	3,600	1,101	167
<b>Secondary schools—</b>						
High.....				95		
Elementary urban schools.....	295	254	236	2,063	188	123
Rural schools.....	679	959	417	1,220	668	37
Night schools.....	32	39	27	64	30	22
<b>Average number belonging:</b>						
Pupils belonging, 1917-18.....	840	1,023	523	3,058	675	106
Pupils belonging, 1916-17.....	926	1,141	595	3,071	868	163
High schools.....				86		
Elementary urban schools.....	260	236	202	1,845	155	115
Rural schools.....	563	772	312	1,090	504	34
Night schools.....	17	15	14	37	16	17
<b>Average daily attendance:</b>						
Average attendance, 1917-18.....	785	928	490	2,767	595	151
Average attendance, 1916-17.....	991	991	541	2,834	774	133
High schools.....				79		
Elementary urban schools.....	250	214	191	1,743	144	107
Rural schools.....	522	700	286	914	439	29
Night schools.....	13	14	13	31	12	15
<b>Attendance per 100 belonging:</b>						
Elementary urban schools.....	96.2	90.7	94.5	94.5	92.9	93.0
Rural schools.....	94.1	93.4	91.6	83.8	87.1	85.3

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities.*

Subjects.	Porto Rico.	San Juan.	Rio Piedras.	Trujillo Alto.	Carolina.	Rio Grande.	Loisa.	Fajardo.
Enrolled during 1917-18.....	141,589	6,972	2,467	938	2,108	1,732	1,856	1,748
Enrolled during 1916-17.....	150,352	6,961	2,741	1,098	2,065	1,789	1,928	1,769
Secondary schools.....								
High schools.....	2,573	688						100
Twelfth grade.....	382	93						16
Eleventh grade.....	601	168						15
Tenth grade.....	710	180						32
Ninth grade.....	880	247						37
Continuation schools.....	773		113		29	43		
Tenth grade.....	188					19		
Ninth grade.....	585		113		29	24		
Night schools.....	3,613	233	20	26	35	34	59	35
Elementary urban schools.....	50,060	6,051	850	214	597	423	475	1,078
Per cent promoted.....	70.9							
Eighth grade.....	2,669	398	51		35	35	16	58
Per cent promoted.....	74.6	61	69		91	77	63	53
Seventh grade.....	2,987	409	46	23	27	37	19	60
Per cent promoted.....	71.6	68	72	72	74	67	74	75
Sixth grade.....	3,918	435	88	16	42	39	27	71
Per cent promoted.....	75.1	80	61	44	79	81	55	65
Fifth grade.....	5,483	726	92	20	83	42	41	95
Per cent promoted.....	68.6	58	80	60	78	62	66	76
Fourth grade.....	7,110	831	136	28	68	61	58	131
Per cent promoted.....	72.1	72	64	71	78	70	55	60
Third grade.....	8,955	1,023	99	47	81	46	53	196
Per cent promoted.....	72.3	76	88	72	89	70	70	61
Second grade.....	9,467	1,231	179	37	129	92	120	218
Per cent promoted.....	73.1	74	74	68	68	84	81	54
First grade.....	9,471	998	159	43	132	71	141	249
Per cent promoted.....	64.3	72	72	49	67	84	54	59
Rural schools.....	84,570		1,484	698	1,447	1,232	1,322	535
Per cent promoted.....	58.0							
Eighth grade.....	8							
Per cent promoted.....	87.5							
Seventh grade.....	45						25	
Per cent promoted.....	75.5						68	
Sixth grade.....	252					5	11	
Per cent promoted.....	64.7					60	82	
Fifth grade.....	1,227		23		22	34	28	
Per cent promoted.....	69.8		73		82	80	50	
Fourth grade.....	9,296		114	69	91	130	142	50
Per cent promoted.....	63.3		62	61	80	64	70	40
Third grade.....	15,843		268	118	224	222	244	104
Per cent promoted.....	63.9		64	64	62	57	65	64
Second grade.....	20,340		358	170	331	290	267	136
Per cent promoted.....	70.1		76	67	63	69	91	95
First grade.....	37,559		721	341	779	561	585	245
Per cent promoted.....	47.1		55	53	84	47	44	47

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities—Continued.*

Subjects.	Ceiba.	Lu- quillo.	Nagua- bo.	Vie- ques.	Huma- cao.	Las Piedras.	Yabu- coa.	Man- nabo.	Arro- yo.
Enrolled during 1917-18.....	631	749	1,520	1,078	2,543	979	2,111	854	966
Enrolled during 1916-17.....	506	795	1,734	1,193	2,755	1,034	1,982	781	1,071
Secondary schools.....									
High schools.....					118				
Twelfth grade.....					21				
Eleventh grade.....					21				
Tenth grade.....					35				
Ninth grade.....					41				
Continuation schools.....							24		
Tenth grade.....							10		
Ninth grade.....							14		
Night schools.....	79	46	51	39	90	44	28	50	35
Elementary urban schools...	106	216	622	486	1,081	180	540	215	472
Eighth grade.....	11	8	27	14	41		26	10	13
Per cent promoted...	81	75	74	96	80		69	100	85
Seventh grade.....		11	28	19	70	10	31	7	20
Per cent promoted...		55	54	89	79	90	80	85	80
Sixth grade.....	11	16	49	35	142	8	46	10	46
Per cent promoted...	72	56	55	86	72	75	93	90	71
Fifth grade.....	11	20	68	44	119	16	60	24	51
Per cent promoted...	62	70	62	64	66	44	90	88	86
Fourth grade.....	13	26	70	62	123	18	70	36	74
Per cent promoted...	70	46	66	82	66	83	86	47	72
Third grade.....	23	40	121	96	213	31	76	21	88
Per cent promoted...	78	73	63	68	61	70	84	71	77
Second grade.....	44	44	154	109	172	48	87	51	106
Per cent promoted...	60	61	68	66	86	88	77	65	79
First grade.....	48	51	105	105	196	49	144	56	74
Per cent promoted...	46	67	84	83	59	73	66	61	77
Rural schools.....	386	487	847	553	1,254	755	1,519	589	449
Per cent promoted...									
Eighth grade.....									
Per cent promoted...									
Seventh grade.....									
Per cent promoted...									
Sixth grade.....									
Per cent promoted...									
Fifth grade.....			8	8			62	11	
Per cent promoted...			63	83			76	82	
Fourth grade.....	21	64	106	40	138	126	169	66	64
Per cent promoted...	20	92	66	58	56	89	69	42	73
Third grade.....	56	104	200	112	206	149	267	78	52
Per cent promoted...	60	83	63	55	71	17	65	40	71
Second grade.....	92	152	238	152	347	170	311	125	107
Per cent promoted...	55	76	61	70	70	73	72	54	67
First grade.....	217	167	295	241	563	810	710	309	226
Per cent promoted...	42	42	53	42	46	48	46	36	49

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities.*—Continued.

Subjects.	Patillas.	Juncos.	Gu-rabo.	Caguas.	San Lorenzo.	Guayama.	Salinas.	Santa Isabel.	Cayey.
Enrolled during 1917-18.....	1,293	1,410	1,317	3,563	1,645	2,644	1,562	927	2,035
Enrolled during 1916-17.....	1,529	1,532	1,508	3,783	1,704	2,740	1,526	885	2,246
Secondary schools.....									
High schools.....				151		141			
Twelfth grade.....				17		12			
Eleventh grade.....				30		30			
Tenth grade.....				45		46			
Ninth grade.....				59		53			
Continuation schools.....		20			9			10	51
Tenth grade.....								25	25
Ninth grade.....		20			9			10	26
Night schools.....	28	42	39	97	60	69	78	55	55
Elementary urban schools.....	380	615	365	1,273	455	1,336	421	410	804
Eighth grade.....	21	24	20	89	20	59	9	25	41
Per cent promoted.....	90	92	40	69	85	81	88	84	93
Seventh grade.....	14	45	24	118	14	72	17	20	31
Per cent promoted.....	86	87	54	53	86	72	82	80	71
Sixth grade.....	25	42	18	116	33	128	30	31	36
Per cent promoted.....	92	60	61	74	70	56	73	74	81
Fifth grade.....	39	70	33	134	40	175	36	61	86
Per cent promoted.....	84	69	60	88	70	73	47	72	78
Fourth grade.....	60	83	49	213	82	168	110	54	131
Per cent promoted.....	70	63	67	91	63	66	88	59	84
Third grade.....	68	119	67	358	117	261	86	86	194
Per cent promoted.....	74	68	57	77	89	68	62	64	81
Second grade.....	92	107	100	186	93	258	60	56	177
Per cent promoted.....	65	80	63	78	74	74	80	60	94
First grade.....	61	125	54	59	56	215	73	77	108
Per cent promoted.....	80	89	63	67	68	74	66	67	88
Rural schools.....	885	733	913	2,041	1,121	1,098	1,063	463	1,125
Eighth grade.....									
Per cent promoted.....									
Seventh grade.....									
Per cent promoted.....									
Sixth grade.....						12			
Per cent promoted.....						50			
Fifth grade.....		7		16		24	13		
Per cent promoted.....				68		41	63		
Fourth grade.....	107	99	69	196	93	102	75	43	43
Per cent promoted.....	68	50	64	73	61	68	83	74	84
Third grade.....	189	156	163	348	159	198	213	105	154
Per cent promoted.....	56	68	67	74	69	62	57	74	69
Second grade.....	218	198	264	496	244	299	300	118	307
Per cent promoted.....	73	64	68	76	72	68	61	74	75
First grade.....	371	273	417	985	625	463	462	186	621
Per cent promoted.....	43	51	56	51	43	49	45	42	60



TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities.*—Continued.

Subjects.	Cidra.	Come- rio.	Agua- s Buenas.	Naran- jito.	Albo- nito.	Barran- quitas.	Barros.	Coamo.	Juana Díaz.
Enrolled during 1917-18.....	999	1,259	871	984	1,309	1,062	2,107	2,117	2,246
Enrolled during 1916-17.....	1,182	1,323	992	955	1,361	1,309	2,023	2,272	2,439
Secondary schools.....									
High schools.....									
Twelfth grade.....									
Eleventh grade.....									
Tenth grade.....									
Ninth grade.....									
Continuation schools.....		16			15			32	37
Tenth grade.....								12	11
Ninth grade.....		16			15			20	26
Night schools.....	40	20	58	8	20	24	29	27	32
Elementary urban schools.....	360	399	258	214	409	294	252	748	566
Eighth grade.....	8	15	11	11	27	1	12	55	36
Per cent promoted...	75	67	64	72	96	0	77	73	77
Seventh grade.....	15	10	8	10	24	35	16	49	40
Per cent promoted...	80	60	63	60	67	66	75	65	88
Sixth grade.....	32	23	13	13	44	21	17	46	51
Per cent promoted...	84	56	61	54	70	67	82	76	70
Fifth grade.....	38	30	35	28	43	33	25	88	63
Per cent promoted...	87	67	51	67	86	64	96	77	73
Fourth grade.....	54	48	39	29	74	50	42	90	78
Per cent promoted...	67	60	43	62	73	74	81	72	74
Third grade.....	70	46	44	56	65	58	39	137	84
Per cent promoted...	78	63	61	55	83	69	94	77	76
Second grade.....	77	108	51	20	51	50	48	124	103
Per cent promoted...	78	76	55	50	100	72	94	81	70
First grade.....	66	89	57	47	81	46	52	159	111
Per cent promoted...	80	56	63	85	90	63	86	69	34
Rural schools.....	599	854	555	712	865	744	1,826	1,310	1,611
Eight grade.....									
Per cent promoted...									
Seventh grade.....								6	
Per cent promoted...								83	
Sixth grade.....							7	18	
Per cent promoted...							43	61	
Fifth grade.....							14	26	45
Per cent promoted...							85	73	84
Fourth grade.....	44	56	45	58	102	87	180	179	126
Per cent promoted...	70	94	82	52	49	60	66	81	67
Third grade.....	96	137	90	114	148	167	279	273	216
Per cent promoted...	81	81	85	71	53	65	77	65	73
Second grade.....	157	183	141	181	184	181	347	264	343
Per cent promoted...	83	85	65	68	64	61	76	79	74
First grade.....	302	475	279	359	431	309	1,019	544	881
Per cent promoted...	73	46	36	40	40	55	47	55	44

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities—Continued.*

Subjects.	Villalba.	Ponce.	Guayama.	Penuelas.	Yauco.	Guánica.	San-Ger-man.	Sabana Grande.	Cabo Rojo.
Enrolled during 1917-18.....	1,206	8,807	1,639	1,478	3,388	1,012	3,203	1,400	2,381
Enrolled during 1916-17.....		9,970	1,749	1,531	3,472	992	3,298	1,389	2,447
Secondary schools.....									
High schools.....		570			104				
Twelfth grade.....		85			24				
Eleventh grade.....		178			18				
Tenth grade.....		146			32				
Ninth grade.....		161			30				
Continuation schools.....			11			17	50	45	57
Tenth grade.....							28	10	32
Ninth grade.....			11			17	22	35	25
Night schools.....	30	142	44	46	62	83	94	49	68
Elementary urban schools.....	170	5,416	429	340	904	655	848	596	914
Eighth grade.....	7	344	11	17	37	30	52	32	43
Per cent promoted.....	85	73	91	82	67	67	60	60	70
Seventh grade.....		308	24	22	43	30	71	42	52
Per cent promoted.....		62	67	73	65	70	90	60	71
Sixth grade.....	24	370	39	28	89	57	73	62	93
Per cent promoted.....	70	83	64	75	84	80	81	77	83
Fifth grade.....	20	571	76	41	139	89	87	87	52
Per cent promoted.....	75	55	50	62	71	72	71	46	70
Fourth grade.....	25	595	57	47	189	101	142	73	144
Per cent promoted.....	32	85	48	81	81	87	70	42	75
Third grade.....	34	1,078	47	59	80	150	133	52	211
Per cent promoted.....	50	71	70	86	86	88	67	52	67
Second grade.....	17	1,221	76	53	139	102	131	67	180
Per cent promoted.....	53	55	71	81	81	81	76	88	73
First grade.....	43	929	99	73	188	96	169	181	139
Per cent promoted.....	55	52	67	58	58	80	70	57	57
Rural schools.....	1,006	2,679	1,155	1,092	2,318	257	2,211	710	1,347
Eighth grade.....									
Per cent promoted.....									
Seventh grade.....									
Per cent promoted.....									
Sixth grade.....					28		15		8
Per cent promoted.....					61		87		50
Fifth grade.....	11	9	5		176		62		19
Per cent promoted.....	73	67	0		74		92		68
Fourth grade.....	75	216	92	135	368	21	271	87	151
Per cent promoted.....	41	82	68	70	74	86	63	63	88
Third grade.....	180	404	199	195	460	28	373	118	311
Per cent promoted.....	65	65	64	66	83	89	64	73	64
Second grade.....	242	620	288	274	466	58	646	182	371
Per cent promoted.....	73	75	73	65	82	84	58	71	84
First grade.....	518	1,430	571	488	820	150	844	323	487
Per cent promoted.....	46	44	47	52	67	62	52	43	59

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities—Continued.*

Subjects.	Lajas.	Mayaguez.	Hormigueros.	Maricao.	Las Marias.	Anasco.	Rincon.	Agua-da.	Lares.
Enrolled during 1917-18.....	1,502	4,295	524	1,277	1,528	1,649	876	1,144	2,849
Enrolled during 1916-17.....	1,674	4,450	514	1,317	1,514	1,894	1,017	1,187	2,950
Secondary schools.....									
High schools.....		256							
Twelfth grade.....		54							
Eleventh grade.....		57							
Tenth grade.....		63							
Ninth grade.....		82							
Continuation schools.....				18		12			13
Tenth grade.....									
Ninth grade.....				18		12			13
Night schools.....	27	123	37	27	35	32	20	22	27
Elementary urban schools.....	329	2,294	142	258	195	489	186	268	539
Eight grade.....	26	145	4	13	6	22	12	9	37
Per cent promoted.....	61	84	100	90	83	86	91	67	51
Seventh grade.....	17	175	11	22	9	41	9	14	47
Per cent promoted.....	65	76	91	77	77	71	100	85	87
Sixth grade.....	41	199	11	24	14	40	14	16	35
Per cent promoted.....	80	78	100	91	78	97	57	94	86
Fifth grade.....	44	171	12	28	9	38	24	30	63
Per cent promoted.....	80	82	100	78	67	76	45	67	46
Fourth grade.....	52	301	17	35	30	54	37	46	101
Per cent promoted.....	80	71	70	63	80	72	73	80	76
Third grade.....	59	325	14	43	37	83	24	45	104
Per cent promoted.....	80	99	64	83	90	91	54	67	78
Second grade.....	39	429	26	40	44	122	27	52	102
Per cent promoted.....	84	83	61	97	82	64	70	84	74
First grade.....	51	549	47	53	46	89	39	56	50
Per cent promoted.....	60	63	60	70	100	36	64	73	94
Rural schools.....	1,146	1,622	345	974	1,298	1,116	670	854	2,270
Eight grade.....									
Per cent promoted.....									
Seventh grade.....									
Per cent promoted.....									
Sixth grade.....	12				7				
Per cent promoted.....	75				85				
Fifth grade.....	25	27		23	7		9		37
Per cent promoted.....	52	59		70	85		77		62
Fourth grade.....	151	136	43	107	101	94	64	77	321
Per cent promoted.....	73	70	69	70	63	46	44	73	58
Third grade.....	296	300	54	187	204	171	132	172	479
Per cent promoted.....	61	55	76	67	59	51	53	63	58
Second grade.....	258	367	90	198	277	273	131	246	535
Per cent promoted.....	84	82	74	72	60	71	69	67	68
First grade.....	404	792	158	459	702	578	334	359	898
Per cent promoted.....	58	40	54	44	42	39	36	55	42

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities—Continued.*

Subjects.	San Se- bastian.	Agua- dilla.	Moca.	Isabela.	Quebra- dillas.	Utu- ado.	Adjun- tas.	Jayuya.	Camuy.
Enrolled during 1917-18.....	2,306	2,566	1,094	1,883	1,087	3,964	2,022	1,388	1,579
Enrolled during 1916-17.....	2,522	2,673	1,146	2,019	1,192	4,420	2,385	1,525	1,623
Secondary schools.....									
High schools.....		122							
Twelfth grade.....		15							
Eleventh grade.....		30							
Tenth grade.....		36							
Ninth grade.....		41							
Continuation schools.....					21	23			
Tenth grade.....					11				
Ninth grade.....					21	12			
Night schools.....	38	68	19	42	37	61	27	22	20
Elementary urban schools...	440	1,110	233	361	309	606	372	267	380
Eighth grade.....	25	63	13	21	23	43	10	20	12
Per cent promoted...	100	90	70	81	87	81	90	90	91
Seventh grade.....	30	71	11	20	33	43	16	14	26
Per cent promoted...	80	67	36	80	85	72	81	100	80
Sixth grade.....	35	77	14	25	39	87	31	17	28
Per cent promoted...	60	80	64	92	76	73	87	94	100
Fifth grade.....	44	150	22	54	48	96	67	34	53
Per cent promoted...	70	79	66	77	75	64	73	85	58
Fourth grade.....	100	190	41	60	55	93	62	50	59
Per cent promoted...	67	77	85	67	84	79	68	78	70
Third grade.....	48	254	61	68	67	115	75	44	55
Per cent promoted...	73	71	87	65	88	58	60	82	74
Second grade.....	51	160	27	60	44	80	59	35	69
Per cent promoted...	72	76	88	79	86	56	68	97	82
First grade.....	107	145	44	49	.....	139	52	53	78
Per cent promoted...	71	78	82	87	.....	75	88	64	73
Rural schools.....	1,918	1,266	842	1,479	670	3,204	1,623	1,099	1,179
Eighth grade.....									
Per cent promoted...									
Seventh grade.....								5	
Per cent promoted...								100	
Sixth grade.....		17		20		5		17	18
Per cent promoted...		88		55		0		65	88
Fifth grade.....		67		62	33	14		38	21
Per cent promoted...		46		50	51	0		60	76
Fourth grade.....	307	221	121	296	52	482	227	157	154
Per cent promoted...	78	82	67	62	63	52	60	63	59
Third grade.....	468	278	207	266	145	610	359	191	220
Per cent promoted...	66	66	76	64	63	57	59	65	55
Second grade.....	527	286	230	238	215	782	391	259	274
Per cent promoted...	74	79	72	67	66	56	66	64	71
First grade.....	616	397	284	457	226	1,341	646	432	492
Per cent promoted...	59	62	54	59	50	36	48	48	46

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities—Continued.*

Subjects.	Hatillo.	Arecibo.	Manati.	Barceloneta.	Ciales.	Vega Baja.	Vega Alta.	Corozal.	Morovis.
Enrolled during 1917-18.....	1,376	5,247	1,965	1,037	2,063	1,819	976	1,557	1,454
Enrolled during 1916-17.....	1,597	5,316	2,209	1,176	2,133	1,860	1,200	1,656	1,660
Secondary schools.....									
High schools.....		228							
Twelfth grade.....		33							
Eleventh grade.....		40							
Tenth grade.....		68							
Ninth grade.....		87							
Continuation schools.....			42		12	42		11	
Tenth grade.....			17			13			
Ninth grade.....			25		12	29		11	
Night schools.....	9	113	67	31	50	50	30	29	38
Elementary urban schools...	267	1,444	732	388	412	534	264	278	247
Eighth grade.....	11	89	41	13	20	30	21		9
Per cent promoted...	78	83	95	84	95	80	71		88
Seventh grade.....	17	95	41	14	27	18	11	18	12
Per cent promoted...	65	73	93	85	77	83	91	50	67
Sixth grade.....	26	121	62	17	30	38	25	17	9
Per cent promoted...	61	75	84	77	97	87	80	65	88
Fifth grade.....	28	185	69	20	45	87	24	18	21
Per cent promoted...	71	62	75	90	93	80	54	39	75
Fourth grade.....	40	223	92	43	58	104	26	40	38
Per cent promoted...	75	70	64	81	80	77	77	60	55
Third grade.....	56	214	150	73	69	98	53	50	49
Per cent promoted...	68	72	84	66	66	84	55	72	77
Second grade.....	37	200	156	71	71	103	51	74	52
Per cent promoted...	91	89	80	73	70	75	72	63	77
First grade.....	52	317	121	137	92	56	53	61	57
Per cent promoted...	94	73	81	66	64	82	81	47	75
Rural schools.....	1,100	3,462	1,124	618	1,589	1,193	682	1,239	1,160
Eighth grade.....	8								
Per cent promoted...	88								
Seventh grade.....	9								
Per cent promoted...	77								
Sixth grade.....	19	11	8						
Per cent promoted...	60	63	63						
Fifth grade.....	49	62	21			30	3	12	11
Per cent promoted...	67	45	67			47	67	50	73
Fourth grade.....	140	328	101	66	148	128	131	131	143
Per cent promoted...	63	50	72	44	65	54	68	51	54
Third grade.....	207	681	219	105	287	272	163	216	252
Per cent promoted...	60	52		57	71	58	75	68	51
Second grade.....	255	738	307	138	335	329	148	301	274
Per cent promoted...	78	60		62	78	70	79	57	53
First grade.....	413	1,642	468	310	819	434	237	579	489
Per cent promoted...	54	39		54	48	50	61	29	48

TABLE IV.—*Pupils enrolled in each grade and per cent of promotions in elementary schools for the island and municipalities—Continued.*

Subjects.	Toa Baja.	Toa Alta.	Do- rado.	Bay- amon.	Gual- nabo.	Cule- bra.
Enrolled during 1917-18.....	1,006	1,252	690	3,442	896	182
Enrolled during 1916-17.....	1,087	1,357	750	3,900	1,101	167
Secondary schools.....						
High schools.....				95		
Twelfth grade.....				12		
Eleventh grade.....				14		
Tenth grade.....				27		
Ninth grade.....				42		
Continuation schools.....						
Tenth grade.....						
Ninth grade.....						
Night schools.....	32	39	27	64	30	22
Elementary urban schools.....	295	254	236	2,063	188	123
Eighth grade.....	16	10	13	88	3	
Per cent promoted.....	56	70	63	83	100	
Seventh grade.....	22	7	7	112	6	
Per cent promoted.....	64	71	100	80		
Sixth grade.....	21	16	20	118	11	5
Per cent promoted.....	52	70	40	78	63	60
Fifth grade.....	19	16	21	190	18	4
Per cent promoted.....	63	62	52	66	67	75
Fourth grade.....	50	25	31	287	26	12
Per cent promoted.....	42	64	32	53	42	67
Third grade.....	61	57	42	348	35	19
Per cent promoted.....	47	53	70	64	69	64
Second grade.....	52	73	52	390	29	13
Per cent promoted.....	63	51	44	75	93	59
First grade.....	54	50	50	530	60	70
Per cent promoted.....	60	56	56	58	50	57
Rural schools.....	679	969	417	1,220	668	37
Eighth grade.....						
Per cent promoted.....						
Seventh grade.....						
Per cent promoted.....						
Sixth grade.....				14		
Per cent promoted.....				50		
Fifth grade.....	30			23		
Per cent promoted.....	67			83		
Fourth grade.....	70	121	44	143	62	
Per cent promoted.....	50	54	43	63	81	
Third grade.....	113	195	60	247	119	11
Per cent promoted.....	57	50	50	50	62	68
Second grade.....	195	255	118	293	159	7
Per cent promoted.....	63	58	58	72	60	61
First grade.....	271	388	195	500	328	19
Per cent promoted.....	43	41	30	55	31	51

TABLE V.—*Estimated population, population of school age, and population of compulsory school age compared with the total enrollment.*

Municipalities.	Estimates of population for 1917.			Enrollment during 1917-18.	Enrollment per 1,000.		
	Total population.	School population (5-18 years).	Of compulsory school age (8-14 years).		Of total population.	Of school population.	Of population of compulsory school age.
Porto Rico.....	1,223,981	427,666	215,819	141,589	116	331	656
San Juan.....	53,237	18,638	9,406	6,972	133	374	741
Rio Piedras.....	17,275	6,038	3,046	2,467	143	402	809
Trujillo Alto.....	6,933	2,428	1,224	938	135	382	766
Carolina.....	16,748	5,863	2,967	2,108	126	359	713
Rio Grande.....	12,620	4,413	2,229	1,732	137	362	777
Loiza.....	14,551	5,100	2,569	1,856	127	364	722
Fajardo.....	14,115	4,941	2,493	1,748	123	354	701
Ceiba.....	4,825	1,687	852	631	131	374	741
Luquillo.....	6,781	2,373	1,197	749	110	316	626
Naguabo.....	15,695	5,494	2,771	1,520	97	275	548
Vieques.....	11,391	3,987	2,012	1,078	95	270	536
Humacao.....	19,259	6,742	3,408	2,543	132	362	747
Las Piedras.....	9,893	3,463	1,748	979	99	288	560
Yabucoa.....	18,946	6,631	3,346	2,111	111	318	631
Maunabo.....	7,771	2,718	1,371	854	110	314	623
Arroyo.....	7,589	2,655	1,339	956	126	360	721
Patillas.....	15,786	5,527	2,788	1,293	82	234	463
Juncos.....	12,778	4,473	2,256	1,410	110	311	625
Gurabo.....	12,173	4,261	2,150	1,317	108	309	612
Caguas.....	29,680	10,360	5,244	3,562	120	343	679
San Lorenzo.....	15,600	5,462	2,784	1,645	106	301	597
Guayama.....	18,992	6,648	3,354	2,044	129	358	716
Salinas.....	12,562	4,362	2,196	1,562	124	358	710
Santa Isabel.....	7,605	2,661	1,342	927	122	348	691
Cayey.....	19,353	6,775	3,418	2,035	105	300	595
Cidra.....	11,578	4,050	2,044	999	86	245	488
Cidra.....	12,208	4,273	2,154	1,259	103	294	584
Comerio.....	9,061	3,171	1,599	871	96	274	545
Agua Buenas.....	9,700	3,395	1,714	934	96	275	545
Naranjito.....	11,817	4,127	2,087	1,300	111	317	622
Albionito.....	11,476	4,018	2,027	1,083	93	264	523
Barranquitas.....	16,422	5,749	2,899	2,107	128	366	726
Barro.....	18,718	6,552	3,316	2,117	113	323	638
Coamo.....	19,000	6,651	3,361	2,246	117	337	668
Juana Diaz.....	12,861	4,502	2,269	1,206	94	267	531
Villalba.....	69,341	24,277	12,246	8,907	127	363	719
Ponce.....	11,313	3,961	1,998	1,639	144	411	815
Guayanilla.....	13,105	4,587	2,313	1,478	113	322	639
Penuelas.....	27,391	9,591	4,837	3,388	124	353	700
Yauco.....	7,035	2,463	1,241	1,012	144	411	815
Guanica.....	24,195	8,470	4,275	3,203	133	378	749
San German.....	12,563	4,407	2,223	1,400	111	318	621
Sabana Grande.....	21,376	7,483	3,775	2,381	111	318	631
Cabo Rojo.....	12,099	4,236	2,206	1,502	124	354	681
Lajas.....	42,117	14,748	7,440	4,295	102	261	577
Mayaguez.....	4,248	1,487	750	624	128	353	700
Hormigueros.....	7,823	2,738	1,380	1,277	163	429	925
Maricao.....	19,979	6,842	3,438	1,528	142	398	788
Las Marias.....	15,741	5,511	2,778	1,649	104	269	566
Anasco.....	7,950	2,782	1,404	876	110	313	624
Rincon.....	12,693	4,433	2,236	1,144	90	257	509
Aguada.....	24,751	8,664	4,370	2,849	115	328	652
Lares.....	20,658	7,231	3,648	2,396	111	331	655
San Sebastian.....	23,407	8,194	4,135	2,566	109	313	621
Aguadilla.....	16,941	5,217	2,632	1,094	64	200	435
Moca.....	18,416	6,446	3,252	1,882	102	262	582
Isabela.....	8,909	3,118	1,573	1,037	116	323	659
Quebradillas.....	33,630	11,776	5,942	3,984	118	338	664
Utuado.....	18,527	6,485	3,270	2,022	109	312	615
Adjuntas.....	11,234	3,631	1,963	1,388	123	353	700
Jayuya.....	12,395	4,339	2,186	1,579	127	363	722
Camuy.....	11,616	4,066	2,060	1,376	118	338	671
Hatillo.....	46,364	16,232	8,191	5,247	117	334	641
Arecibo.....	18,838	6,595	3,336	1,965	104	262	590
Manati.....	12,736	4,453	2,246	1,037	81	232	461
Barceloneta.....	20,104	7,088	3,548	2,063	102	293	581
Ciales.....	14,020	4,908	2,476	1,819	129	371	734
Vega Baja.....	8,899	3,111	1,570	976	110	313	622
Vega Alta.....	14,122	4,965	2,504	1,557	110	313	622
Corozal.....	13,599	4,782	2,402	1,454	107	305	605
Morovis.....	6,825	2,391	1,206	1,006	147	421	824
Toa Baja.....	9,972	3,491	1,780	1,262	126	355	711
Toa Alta.....	5,338	1,899	941	690	127	363	723
Dorado.....	28,237	9,878	4,979	3,442	122	349	691
Bayamon.....	7,888	2,781	1,401	886	112	318	623
Guainabo.....	1,437	498	252	183	127	365	723
Culebra.....							

TABLE VI.—*Report on school buildings.*

Municipalities.	Public property.				Rented.			
	Urban.		Rural.		Urban.		Rural.	
	Number of buildings.	Class-rooms.	Number of buildings.	Class-rooms.	Number of buildings.	Class-rooms.	Number of buildings.	Class-rooms.
San Juan.....	14	152	.....	.....	6	32	.....	.....
Rio Piedras.....	4	22	10	12	1	1	10	10
Trujillo Alto.....	1	5	2	2	.....	.....	9	9
Carolina.....	3	14	4	4	1	2	18	18
Rio Grande.....	2	10	6	7	1	1	13	14
Loiza.....	1	6	.....	.....	3	6	20	20
Fajardo.....	3	23	1	2	4	9	10	11
Ceiba.....	.....	.....	1	1	1	4	8	8
Luquillo.....	.....	.....	.....	.....	2	5	9	9
Naguabo.....	1	10	5	5	2	3	14	14
Vieques.....	3	13	1	2	.....	.....	9	9
Humacao.....	3	25	5	6	1	2	18	18
Las Piedras.....	2	3	2	3	1	2	11	11
Yabucoa.....	2	9	4	7	5	6	20	23
Maunabo.....	1	5	2	2	1	1	8	9
Arroyo.....	2	8	3	3	1	2	7	7
Patillas.....	1	4	3	3	4	8	13	14
Juncos.....	1	1	8	8	2	16	5	5
Gurabo.....	2	9	3	3	4	7	11	11
Caguas.....	3	19	2	2	6	17	30	32
San Lorenzo.....	1	6	2	2	2	6	15	15
Guayama.....	3	15	3	5	7	20	15	15
Salinas.....	2	10	7	12	.....	.....	7	7
Santa Isabel.....	3	11	9	10	.....	.....	1	1
Cayey.....	4	18	10	10	1	13	14	14
Cidra.....	1	4	2	2	2	2	12	12
Comerio.....	3	10	4	4	.....	.....	15	15
Aguas Buenas.....	1	5	5	5	.....	.....	6	6
Naranjito.....	1	4	7	7	2	2	5	6
Albionito.....	1	8	1	1	1	2	10	10
Barranquitas.....	2	6	5	5	.....	.....	24	25
Barros.....	2	6	4	4	.....	.....	25	26
Coamo.....	2	10	3	3	.....	.....	24	25
Juana Diaz.....	2	14	11	12	.....	.....	16	16
Villalba.....	.....	.....	.....	.....	3	4	19	19
Ponce.....	15	138	.....	.....	3	5	45	50
Guayanilla.....	2	6	6	6	5	5	15	15
Penuelas.....	2	7	1	1	2	3	16	18
Yauco.....	2	22	21	24	1	4	14	14
Guanica.....	1	8	3	4	3	8	1	1
San German.....	1	14	5	7	2	4	25	28
Sabana Grande.....	1	4	6	6	5	11	4	4
Cabo Rojo.....	1	4	5	5	5	19	17	19
Lajas.....	1	4	13	13	4	5	10	10
Mayaguez.....	5	50	23	26	1	10	13	13
Hormigueros.....	.....	.....	.....	.....	2	4	6	6
Maricao.....	1	4	9	10	3	5	7	7
Las Marias.....	1	4	8	9	1	1	13	13
Anasco.....	2	10	7	7	2	4	13	13
Rincon.....	1	4	.....	.....	1	1	10	11
Aguada.....	1	5	5	5	2	3	13	14
Lares.....	3	8	8	9	3	8	19	21
San Sebastian.....	1	4	6	7	3	6	19	19
Aguadilla.....	2	16	4	5	4	13	14	17
Moca.....	1	4	8	8	1	2	7	7
Isabela.....	2	10	3	4	1	1	19	22
Quebradillas.....	3	8	5	7	1	2	7	9
Utua.....	1	12	9	10	2	5	32	32
Adjuntas.....	1	4	11	11	4	7	14	14
Jayuya.....	.....	.....	1	1	3	5	15	15
Camuy.....	3	10	13	14	.....	.....	3	3
Hatillo.....	1	4	10	15	1	2	2	2
Arecibo.....	4	51	12	22	1	2	41	41
Manati.....	1	8	7	8	3	9	13	13
Barceloneta.....	1	4	2	4	4	7	11	11
Ciales.....	2	9	1	1	1	2	25	26
Vega Baja.....	1	8	5	6	2	7	13	13
Vega Alta.....	2	7	3	4	1	1	7	7
Corozal.....	1	6	7	9	1	2	8	8
Morovis.....	.....	.....	7	7	1	5	12	12
Toa Baja.....	1	4	6	8	3	4	7	7
Toa Alta.....	1	6	6	6	.....	.....	10	10
Dorado.....	.....	.....	1	1	5	5	10	10
Bayamon.....	3	14	3	4	10	32	17	19
Guainabo.....	.....	.....	3	3	2	5	10	11
Culebra.....	.....	.....	1	1	1	2	.....	.....
Total.....	152	948	388	451	164	397	1,008	1,049



TABLE VII.—*Distribution by grade, age, and sex of pupils enrolled during the year 1917-18.*

## A. SECONDARY SCHOOLS.

Ages.	High schools.					Continuation schools.			All secondary schools.				
	Grades.					Grades.			Grades.				
	12	11	10	9	Total.	10	9	Total.	12	11	10	9	Total.
<b>BOYS.</b>													
13			1	10	11		4	4		1	14		15
14			5	48	54		18	18		5	66		72
15	1	12	32	98	143	3	31	34	1	12	35	129	177
16	6	34	68	121	229	11	53	64	6	34	79	174	293
17	24	50	75	82	231	15	62	77	24	50	90	144	308
18	30	66	79	60	235	16	63	79	30	66	95	123	314
19	52	55	49	31	187	8	22	30	52	55	67	53	217
20	40	25	21	12	98	3	9	12	40	25	24	21	110
21	19	14	5	6	44	3	2	5	19	14	8	8	49
22	3	8	2	2	15	4		4	3	8	6	2	19
23	2	1			3		1	1	2	1		1	4
24	2	1			3				2	1			3
25	2				2				2				2
26							1	1				1	1
Total	181	267	337	470	1,255	63	266	329	181	267	400	736	1,594
Average age	19.1	18.1	17.3	16.3	17.4	17.9	16.9	17.1	19.1	18.1	17.4	16.5	17.2
<b>GIRLS.</b>													
12				1	1		1	1				2	2
13			1	13	14		6	6		1	1	10	20
14		3	18	46	67	2	17	19		3	20	63	86
15		19	46	106	171	10	71	81		19	56	177	252
16	6	42	68	101	217	24	85	109	6	42	92	186	326
17	25	82	104	83	294	33	78	111	25	82	137	161	405
18	50	90	94	45	269	44	44	88	50	90	128	89	357
19	75	65	39	8	187	12	15	27	75	65	51	23	214
20	29	16	11	5	61		2	2	29	16	11	7	63
21	7	9	1	2	19				7	9	1	2	19
22	6	6	1		13				6	6	1		13
23	2	2			4				2	2			4
24	1				1				1				1
Total	201	334	373	410	1,318	125	319	444	201	334	498	729	1,762
Average age	18.8	17.7	16.9	15.9	17.1	17.1	16.3	16.5	18.8	17.7	17.0	16.1	16.9
<b>BOYS AND GIRLS.</b>													
12				1	1		1	1				2	2
13			2	23	25		10	10			2	33	35
14		4	23	94	121	2	35	37		4	25	129	158
15	1	31	78	204	314	13	102	115	1	31	91	306	429
16	12	76	136	222	446	35	138	173	12	76	171	360	619
17	49	132	179	165	525	48	140	188	49	132	227	305	713
18	80	156	163	105	504	60	107	167	80	156	223	212	671
19	127	120	88	39	374	20	37	57	127	120	108	76	431
20	69	41	32	17	159	3	11	14	69	41	35	28	173
21	26	23	6	8	63		2	5	26	23	9	10	68
22	9	14	3	2	28	4		4	9	14	7	2	32
23	4	3			7		1	1	4	3		1	8
24	3	1			4				3	1			4
25	2				2				2				2
26							1	1				1	1
Total	382	601	710	890	2,573	188	585	773	382	601	898	465	3,346
Average age	18.9	17.7	17.1	16.2	17.2	17.4	16.5	16.8	18.9	17.7	17.2	16.3	17.1

TABLE VII—*Distribution by grade, age, and sex of pupils enrolled during the year 1917-18—Continued.*

## B. ELEMENTARY URBAN SCHOOLS.

		Grades.									
Ages.		8	7	6	5	4	3	2	1	Total.	Per cent at each age.
BOYS.											
5									59	59	0.2
6								32	522	556	2.7
7					1	3	42	294	1,296	1,636	6.2
8					12	25	293	831	1,165	2,326	8.8
9				3	34	177	562	979	726	2,481	9.4
10	1			10	156	449	922	1,087	577	3,202	12.3
11	1			86	323	655	903	652	261	2,895	11.1
12	18	14		293	647	936	935	620	185	3,715	14.2
13	87	232		420	671	711	585	284	59	3,349	11.6
14	217	356		511	524	523	313	128	11	2,583	9.8
15	336	378		436	307	229	112	37	1	1,836	7.0
16	293	268		269	138	74	18	8	1	1,069	4.1
17	234	143		87	24	1	3			492	1.7
18	125	36		26	7	1	2			197	.7
19	31	14		1	1					47	.2
20	8			1						9	.....
21	1	1								2	.....
Total.....	1,352	1,523	2,143	2,845	3,784	4,092	4,952	4,863	26,154	100.00	.....
Average age.....	15.6	14.7	14.0	12.9	12.3	11.0	10.0	8.2	11.4	.....	.....
GIRLS.											
5									61	61	0.2
6								38	534	572	2.4
7							49	376	1,389	1,814	7.6
8					11	43	319	882	1,090	2,345	9.8
9					56	168	607	914	657	2,402	10.5
10		1		19	187	461	925	955	523	3,071	12.8
11	2	17		119	381	653	863	624	176	2,835	11.9
12	20	114		305	683	794	804	458	135	3,313	13.9
13	111	280		422	595	643	467	178	34	2,730	11.4
14	271	392		474	448	412	173	74	9	2,253	9.4
15	369	378		281	219	126	45	15		1,433	6.0
16	291	198		121	47	18	11	1		687	2.9
17	168	73		27	11	8				287	.8
18	69	10		3						85	.4
19	12	1		1						14	.....
20	4									4	.....
21											.....
Total.....	1,317	1,464	1,775	2,638	3,326	4,263	4,515	4,608	23,906	100.00	.....
Average age.....	15.3	14.3	13.3	12.5	11.9	10.8	9.7	8.4	11.1	.....	.....
BOYS AND GIRLS.											
5									120	120	.2
6							2	70	1,056	1,128	2.3
7					1	8	91	670	2,685	3,450	6.9
8					23	68	612	1,713	2,255	4,671	9.3
9				3	90	345	1,199	1,893	1,383	4,882	9.7
10	1	1		29	343	910	1,847	2,042	1,100	6,273	12.5
11	3	31		205	704	1,308	1,766	1,276	437	5,730	11.4
12	38	195		598	1,330	1,730	1,739	1,078	320	7,028	14.4
13	198	512		842	1,266	1,354	1,052	462	93	5,779	11.5
14	488	748		985	972	935	486	202	20	4,836	9.6
15	705	756		717	626	355	157	52	1	3,269	6.5
16	584	466		390	185	92	29	9	1	1,756	3.5
17	402	216		114	35	9	3			779	1.6
18	194	46		22	7	1	2			282	.5
19	43	15		2	1					61	.1
20	12			1						13	.....
21	1	1								2	.....
Total.....	2,669	2,967	3,918	5,483	7,110	8,955	9,467	9,471	50,060	100.00	.....
Average age.....	15.5	14.5	13.6	12.7	12.1	10.9	9.8	8.3	11.3	.....	.....

TABLE VII—*Distribution by grade, age, and sex of pupils enrolled during the year 1917-18—Continued.*

## C. RURAL SCHOOLS.

Ages.	Grades.									Per cent at each age.
	8	7	6	5	4	3	2	1	Total.	
BOYS.										
5								448	448	0.9
6							20	2,375	2,395	4.9
7						12	285	4,596	4,883	9.9
8					2	151	1,255	4,785	6,193	12.6
9				3	71	626	1,921	3,209	5,830	11.9
10			2	11	361	1,339	2,640	2,969	7,342	14.9
11				10	48	671	1,638	1,902	5,634	11.4
12				12	122	1,237	2,127	1,873	6,543	13.3
13		5	23	170	1,189	1,503	976	412	4,278	8.7
14		4	41	169	1,016	1,002	520	201	2,953	6.0
15	1	6	42	130	591	509	214	91	1,584	3.2
16	1	2	34	64	299	249	92	42	783	1.6
17		4	11	22	97	89	31	8	262	.5
18	2	2	3	9	48	34	13	1	112	.2
19			2	2	2	4	1		11	
20						1			1	
Total	4	23	180	750	5,584	9,284	11,743	21,694	49,262	100.00
Average age	17	15.1	14.4	13.6	12.9	12.0	10.6	8.6	10.3	
GIRLS.										
5								391	391	1.1
6							29	1,988	2,017	5.7
7						18	286	3,494	3,786	10.8
8					16	195	1,018	3,540	4,769	13.6
9					71	545	1,462	2,172	4,250	12.1
10			1	21	365	1,099	1,986	2,128	5,900	15.9
11			5	56	596	1,271	1,413	926	4,288	11.9
12		1	6	101	865	1,525	1,288	755	4,541	13.0
13		2	11	108	845	1,006	640	291	2,903	8.2
14	1	9	17	106	558	559	272	109	1,631	4.6
15		5	19	51	253	220	135	44	727	2.0
16	3	3	13	31	102	79	40	17	288	.8
17		1		3	21	29	17	8	79	.2
18					16	11	9	2	38	.1
19					4	2	2		8	
Total	4	22	72	477	3,712	6,559	8,597	15,865	35,308	100.00
Average age	15.5	14.3	14.0	13.0	12.4	11.6	10.4	8.4	9.9	
BOYS AND GIRLS.										
5								839	839	1.0
6							49	4,363	4,412	5.2
7						30	571	8,090	8,691	10.3
8					18	346	2,273	8,325	10,962	13.0
9				3	142	1,171	3,383	5,381	10,080	11.9
10			3	32	726	2,438	4,626	5,117	12,942	15.3
11		1	15	104	1,267	2,909	3,315	2,291	9,802	11.7
12		1	18	223	2,102	3,652	3,161	1,927	11,084	13.1
13		7	24	278	2,034	2,509	1,616	708	7,181	8.5
14	1	13	68	275	1,574	1,561	792	310	4,584	5.4
15	1	11	61	181	844	729	349	135	2,311	2.7
16	4	5	47	95	401	328	132	59	1,071	1.3
17		5	11	25	118	118	48	16	341	.4
18	2	2	3	9	64	45	22	3	150	.2
19			2	2	6	6	3		19	
20						1			1	
Total	8	45	252	1,227	9,296	15,843	20,340	37,569	84,570	100.00
Average age	16.0	14.7	14.2	13.4	12.7	11.8	10.5	8.5	10.2	

TABLE VIII.—*Private schools of Porto Rico.*

Number of schools 67, in 34 of which the official course of study is followed. Average length of school year, 10 months. Number of teachers, 246. Enrollment, 7,248, distributed as follows:

Kindergarten.....	120	Grade 7.....	270
Grade 1.....	2,891	Grade 8.....	201
Grade 2.....	1,020	Grade 9.....	226
Grade 3.....	855	Grade 10.....	113
Grade 4.....	626	Grade 11.....	62
Grade 5.....	542	Grade 12.....	35
Grade 6.....	287		

Average daily attendance, 6,596.

TABLE IX.—*Expenditures for educational purposes and per capita costs, years ending June, 1899 to 1918.*

	1899	1900	1901	1902	1903	1904	1905	1906
Enrollment.....	29,172	24,392	38,000	61,899	70,216	61,270	63,413	68,828
Attendance.....	21,873	20,108	23,452	31,466	36,306	41,498	45,201	45,417
Population of Porto Rico.....	953,243	964,746	976,841	988,007	1,000,907	1,012,202	1,023,717	1,035,429
School population.....	322,393	325,002	328,194	332,497	336,228	340,926	345,805	350,111
Insular revenues.....		\$1,831,094	\$2,074,894	\$2,282,152	\$2,305,935	\$2,263,216	\$2,520,272	\$2,554,554
Expenditures for education.....	\$288,098	377,111	530,662	753,545	808,879	873,603	878,868	905,929
By school boards.....		83,063	112,537	118,210	159,973	182,583	204,358	246,271
By insular government.....	288,098	294,048	418,125	635,335	643,906	691,020	674,510	659,658
University of Porto Rico.....			4,850	10,696	13,973	18,428	20,000	23,200
Department of education.....	288,098	294,048	413,275	624,639	629,933	672,562	664,510	636,458
Per cent of insular revenue spent for education.....		16.1	20.2	27.8	27.9	30.5	26.8	25.8
Expenditures classified, elementary schools.....	274,203	347,821	472,944	664,045	669,921	702,132	687,128	731,954
Salaries of teachers.....	206,752	204,107	266,010	320,357	389,102	397,570	389,622	396,867
Textbooks and supplies.....	50,026	35,199	40,843	40,044	40,636	32,377	31,911	25,702
Incidentals.....	18,425	20,648	35,689	28,885	12,391	18,750	12,269	7,148
Spent by school boards for rent, furniture, etc.....		83,063	112,537	118,210	159,973	182,583	204,358	246,271
Expended for schoolhouses by department of education.....		4,804	17,865	156,549	67,729	70,852	48,967	55,965
High schools.....			11,800	12,052	24,361	33,273	38,560	35,957
Industrial schools.....	397				16,227	28,873	35,643	26,196
University of Porto Rico.....			4,850	10,696	13,973	18,428	20,000	23,200
Scholarships.....						4,628	12,979	5,193
In Porto Rico.....				15,000	14,865	14,010	14,397	14,775
In United States.....								
Office and field expenses of department of education and miscellaneous expenditures.....	13,498	29,290	41,068	51,752	64,532	72,258	70,161	68,655
Cost of books and supplies per pupil enrolled.....	1.71	1.44	1.07	.65	.58	.53	.50	.37
Total for education per pupil.....	9.88	15.46	13.61	12.18	11.45	14.26	13.86	13.16
Cost of elementary education per pupil.....	9.40	14.26	12.45	11.24	10.28	12.00	11.52	11.90
Instruction and maintenance. Buildings and sites.....	9.40	14.60	11.98	8.59	9.24	10.79	10.70	10.99
		.20	.47	2.65	1.04	1.21	.89	.91
Cost of education per inhabitant.....	.302	.391	.543	.763	.797	.863	.853	.875

TABLE IX.—*Expenditures for educational purposes and per capita costs, years ending June, 1899 to 1918—Continued.*

	1907	1908	1909	1910	1911
Enrollment.....	72,052	80,167	108,125	121,453	145,525
Attendance.....	47,277	57,118	74,522	84,258	103,102
Population of Porto Rico.....	1,047,699	1,080,477	.....	1,118,012	.....
School population.....	354,721	360,551	.....	380,640	.....
Of compulsory age.....	.....	.....	.....	197,132	.....
Insular revenues.....	\$3,538,241	\$3,371,541	\$3,180,111	\$3,451,267	\$3,986,746
Expenditures for education.....	918,516	1,063,311	1,427,451	1,371,490	1,394,380
By school boards.....	257,859	340,774	437,486	419,161	403,691
By insular government.....	660,657	752,537	989,965	952,329	990,689
University of Porto Rico.....	19,785	30,509	95,974	90,740	105,000
Department of education.....	640,872	732,030	893,991	861,589	885,689
Per cent of insular revenue spent for education.....	18.7	22.3	31.1	27.6	24.8
Expenditures classified:					
Elementary schools.....	750,631	931,960	1,235,432	1,185,164	1,194,367
Salaries of teachers.....	424,527	508,503	647,520	675,942	715,745
Textbooks and supplies.....	35,787	31,065	42,668	47,337	53,400
Incidentals.....	5,732	5,819	6,971	6,975	7,417
Spent by school boards for rent, furniture, etc.....	257,859	233,091	346,385	355,155	352,243
Expended for schoolhouses—					
By department of education.....	26,726	45,798	100,787	35,748	14,114
By school boards.....	.....	107,684	91,101	64,007	51,448
High schools <sup>1</sup> .....	43,206	46,350	21,854	21,857	27,626
Industrial schools.....	19,242	.....	.....	.....	.....
University of Porto Rico.....	19,785	20,507	.....	.....	.....
Instruction and maintenance.....	.....	.....	52,878	73,294	86,905
Equipment.....	.....	.....	43,096	17,446	18,096
Scholarships—					
In Porto Rico.....	5,176	8,421	20,034	20,534	16,624
In United States.....	14,600	14,354	10,639	9,962	8,413
Office and field expenses of department of education and miscellaneous expenditures.....	65,876	71,719	43,518	43,233	42,349
Cost of books and supplies per pupil enrolled.....	.50	.39	.41	.39	.37
Total for education per pupil.....	12.75	13.64	13.58	11.29	9.58
Cost of elementary education per pupil.....	11.47	12.58	12.71	10.63	9.30
Instruction and maintenance.....	11.06	10.51	10.74	9.74	8.79
Buildings and sites.....	.41	2.07	1.97	.89	.51
Cost of high schools per pupil.....	.....	.....	68.94	42.11	45.97
Cost of education per inhabitant.....	.877	1.031	1.277	1.227	1.247
Elementary <sup>2</sup> .....	.716	.879	1.105	1.060	1.068
Secondary <sup>2</sup> .....	.....	.....	.105	.101	.119

	1912	1913	1914	1915	1916	1917	1918
Enrollment.....	160,657	161,785	207,010	168,319	151,562	152,063	141,589
Attendance.....	114,834	117,360	155,830	128,376	120,099	116,779	106,441
Population of Porto Rico.....	.....	.....	.....	1,200,000	.....	1,223,981	1,223,981
School population.....	.....	.....	.....	419,282	.....	427,666	427,666
Of compulsory age.....	.....	.....	.....	211,588	.....	215,819	215,819
Insular revenues.....	\$4,369,164	\$4,382,544	\$4,753,903	\$3,727,910	.....	\$4,957,684	.....
Expenditures for education.....	1,518,779	1,814,829	2,698,263	2,070,496	\$1,840,016	2,106,389	2,325,802.43
By school boards.....	386,435	579,344	728,165	562,680	491,710	588,067	730,947.00
By insular government.....	1,132,344	1,235,485	1,970,098	1,477,816	1,348,306	1,518,322	1,594,855.43
University of Porto Rico.....	151,969	227,975	192,112	78,187	121,368	141,317	146,678.92
Department of education.....	980,375	1,007,510	1,777,986	1,399,629	1,226,838	1,377,005	1,448,176.51

<sup>1</sup> Until 1909 the expenditures for high schools are included with those of certain elementary schools.<sup>2</sup> From 1909-1915 the expenditures for continuation schools are included with those of elementary schools from 1915-16 with secondary schools.

TABLE IX.—*Expenditures for educational purposes and per capita costs, years ending June, 1899 to 1918—Continued.*

	1912	1913	1914	1915	1916	1916	1918
Per cent of insular revenue spent for education.....	25.9	28.2	41.4	39.6	.....	32.4	.....
Expenditures classified:							
Elementary schools	\$1,267,063	\$1,483,476	\$2,287,569	\$1,849,481	\$1,526,202	\$1,775,304	\$1,958,203.18
Salaries of teachers.....	778,055	800,600	1,347,165	1,078,498	984,471	1,110,563	1,108,306.55
Textbooks and supplies.....	66,390	76,514	129,798	90,296	44,891	69,500	108,949.63
Incidentals.....	9,736	9,288	28,261	10,471	5,130	6,889	10,000.00
Spent by school boards for rent, furniture, etc. . .	350,616	453,885	438,671	394,319	341,392	435,809	405,390.00
Expended for schoolhouses—							
By department of education.....	26,447	17,730	54,180	77,537	.....	.....	.....
By school boards.....	35,819	129,459	289,494	198,361	150,318	152,542	325,557.00
High schools.....	31,503	32,128	87,046	75,806	.....	.....	.....
High and continuation schools.....	.....	.....	.....	.....	95,124	112,375	116,457.00
Industrial schools.....	.....	.....	44,472	.....	.....	.....	.....
University of Porto Rico—							
Instruction and maintenance.....	112,666	143,750	172,272	73,364	113,987	128,099	140,201.32
Equipment.....	39,303	84,225	19,840	4,823	7,381	8,694	6,468.60
Scholarships—							
In Porto Rico.....	15,472	15,792	15,458	.....	.....	.....	.....
In United States.....	8,297	8,459	8,562	12,746	7,614	3,500	500.00
Office and field expenses of department of education and miscellaneous expenditures.....	44,475	46,999	63,044	54,273	89,708	92,980	103,963.33
Cost of books and supplies per pupil enrolled.....	0.41	0.47	0.63	0.54	0.30	0.43	.77
Total for education per pupil.....	9.45	11.12	13.03	13.68	12.14	13.85	15.36
Cost of elementary education per pupil.....	8.96	10.20	12.67	11.75	10.40	12.07	14.16
Instruction and maintenance.....	8.52	9.22	10.77	10.00	9.08	11.07	11.81
Buildings and sites.....	.44	.98	1.90	1.75	.99	1.00	2.35
Cost of high schools per pupil.....	34.62	25.62	64.67	45.31	.....	.....	.....
Cost of secondary schools per pupil.....	.....	.....	.....	.....	54.11	34.10	34.80
Cost of education per inhabitant.....	1.358	1.623	1.762	1.725	1.533	1.72	1.93
Elementary.....	1.134	1.327	2.046	1.541	1.272	1.45	1.56
Secondary.....	.164	.233	.250	.128	.180	.21	.086

From 1900-1915 the expenditures for continuation schools are included with those of elementary schools; from 1915-16 with secondary schools.

TABLE X.—*Financial tables.*

## EXPENDITURES FOR TEXTBOOKS AND SCHOOL SUPPLIES, 1917-18.

Textbooks and school supplies.....	\$108,949.63
Contingent expenses:	
Common schools.....	6,899.95
High schools.....	5,874.23
<b>Total.....</b>	<b>121,713.79</b>

TABLE X.—*Financial tables*—Continued.

## EXPENDITURES FOR TEXTBOOKS AND SCHOOL SUPPLIES, 1917-18—Continued.

COMMON-SCHOOL TEXTBOOKS.	
On hand June 30, 1917.....	894,439
Purchased during year.....	176,100
Total.....	1,070,539
Condemned during year.....	75,088
On hand June 30, 1918.....	995,451
HIGH-SCHOOL TEXTBOOKS.	
On hand June 30, 1917.....	48,672
Purchased during year.....	46,113
Total.....	97,785
Condemned and sold during year.....	14,087
On hand June 30, 1918.....	83,698
Total common-school books.....	995,451
Total high-school books.....	83,698
	1,078,149

## COMMON-SCHOOL TEACHERS, 1917-18.

[Amounts paid, by school months.]

Month.	Number of teachers.	Amount paid.
1917.		
October.....	2,368	\$117,971.99
November.....	2,330	120,915.26
December.....	2,464	122,610.12
1918.		
January.....	2,498	125,798.36
February.....	2,506	124,902.86
March.....	2,502	120,591.00
April.....	2,542	125,747.12
May.....	2,540	124,909.67
June.....	2,551	124,860.18

Average number of teachers, 2,484, at an average salary of \$44.61.

Average number of night school teachers, 91 for five months, at an average salary of \$9.22.

Repayments as provided by law are shown in the table following.

## REPAYMENTS, COMMON-SCHOOL TEACHERS.

Fiscal year.	Teachers.	Days absent.	Days repaid.	Amount.
1911-12.....	1,770	8,904	7.251	\$13,692.20
1912-13.....	1,855	7,610	1,958	4,360.74
1913-14.....	2,431	7,101	4,750	13,161.57
1914-15.....	2,330	8,471	6,239	14,696.30
1915-16.....	2,323	7,150	6,107	14,611.79
1916-17.....	2,513	12,581	9,193	19,993.58
1917-18.....	2,484	13,932	8,516	26,340.21

Total amount paid from "Salaries, common schools," is as follows:

Supervisor of schools (12 months).....	\$45,926.94
All teachers (9 months).....	1,108,306.55
Total.....	1,154,233.49

## SALARIES, HIGH SCHOOLS.

From the total amount of \$89,660 made available by appropriation and transfers, the following payments were made:

Ten principals for 10 months (1 at \$1,800, 1 at \$1,600, 1 at \$1,300, 1 at \$1,200, 3 at \$1,100, and 3 at \$1,000).....	\$12,493.23
High-school teachers for 9 months (1 at \$1,170, 2 at \$1,080, 36 at \$700, 1 at \$855, 30 at \$810, 1 at \$765, 8 at \$720, and 1 at \$360).....	70,377.34
Four janitors for 12 months (2 at \$360, 1 at \$240).....	1,270.00
Total.....	84,140.67
Balance.....	5,519.33
Total appropriation.....	89,660.00

TABLE X.—*Financial tables*—Continued.

## COMPARISON OF APPROPRIATIONS FOR DEPARTMENT OF EDUCATION.

Appropriations.	1915-16	1916-17	1917-18	1918-19	Increase.
Salaries and contingent expenses, office of the commissioner.....	\$45,460	\$48,126.68	\$58,480	\$54,760	.....
Salaries and contingent expenses, common schools.....	1,072,650	1,210,140.00	1,234,540	1,499,600	\$255,060
Textbooks and school supplies.....	50,000	69,500.00	75,000	75,000	.....
Salaries and contingent expenses, high schools.....	58,845	58,845.00	83,000	105,000	22,000
Scholarships, United States.....	8,250	3,500.00	500	500	.....
Summer institutes.....	.....	2,000.00	2,000	2,000	.....
Girls' Charity School: Salaries, subsistence, and contingent.....	.....	<sup>1</sup> 13,420.07	<sup>2</sup> 37,459	.....	.....
Boys' Charity School: Salaries, subsistence, and contingent.....	.....	<sup>1</sup> 23,331.73	60,045	(?)	.....
Total.....	1,235,205	1,428,863.48	1,551,024	1,726,860	277,060
Decrease, office salaries and charity schools.....	.....	.....	.....	.....	101,224
Total increase.....	.....	.....	.....	.....	175,836

<sup>1</sup> Charity school appropriations were taken over by this department under date of Mar. 14, 1917.<sup>2</sup> Charity school appropriations were transferred to department of sanitation Feb. 8, 1918.





TABLE XI.—School-board finances—Receipts and expenditures, 1917-18.

Municipality.	Cash on hand June 30, 1917.	Receipts by the school-board treasurers.					Retained by insular treasurer for repayment of loans.	Aggregate resources.	Aggregate payments, including those retained by insular treasurer.	Cash balance June 30, 1918.
		School fund.	School tax.	Miscellaneous.		Total receipts, including balance.				
				Interest on deposits.	Reimbursements.	Gifts.	Loan fund.			
Adjuntas <sup>1</sup> .....	\$2,198.70	\$3,805.75	\$1,990.30	\$38.75	.....	.....	.....	\$8,037.50	\$4,080.36	\$4,007.22
Aguada.....	2,759.52	3,527.88	2,122.87	67.13	.....	.....	.....	8,477.50	6,117.18	2,725.20
Aguadilla.....	2,415.07	3,373.88	2,474.70	48.65	.....	.....	.....	7,142.30	6,023.71	1,567.65
Aguas Buenas.....	268.37	946.45	701.91	12.44	.....	.....	.....	2,029.17	1,390.20	1,762.98
Alhambra.....	594.38	1,082.42	1,268.48	24.44	\$8.61	.....	.....	3,008.34	3,212.89	1,106.96
Anasco.....	502.41	3,459.57	2,265.83	28.59	.....	.....	.....	711.41	4,319.78	2,319.81
Arecibo.....	9,609.05	13,047.76	9,969.69	219.87	.....	.....	.....	32,736.39	29,747.68	6,983.71
Arroyo.....	1,748.84	3,085.36	674.46	35.57	.....	.....	.....	6,244.20	3,726.95	6,983.71
Barceloneta.....	9,060.38	4,004.24	2,883.55	232.54	.....	.....	.....	17,000.00	9,269.04	8,841.67
Barranquitas.....	711.24	1,121.26	2,667.81	25.75	5.64	.....	.....	2,778.76	2,037.89	780.87
Barros.....	1,763.24	1,070.12	1,070.12	19.24	.....	.....	.....	3,577.94	2,646.19	981.65
Bayamon <sup>1</sup> .....	1,458.46	9,107.36	6,326.72	55.55	.....	.....	.....	15,949.21	5,568.88	10,860.38
Cabo Rojo.....	2,173.88	6,529.69	2,721.67	69.55	.....	\$131.00	.....	9,625.89	7,481.77	2,194.12
Caguas.....	1,832.24	7,867.14	6,057.08	98.75	.....	.....	.....	15,955.18	15,710.45	2,276.98
Camuy.....	6,943.24	2,214.38	1,928.94	108.16	.....	.....	.....	11,637.72	7,184.40	4,483.22
Carolina.....	1,490.06	4,772.85	2,460.83	41.13	.....	.....	.....	8,756.86	7,264.34	2,109.94
Caye.....	1,532.57	8,798.04	2,671.44	108.05	17.90	.....	\$30,000.00	38,156.00	2,604.63	2,523.56
Cebal.....	2,016.07	1,214.40	2,597.72	36.94	.....	.....	.....	3,807.13	2,134.54	1,672.59
Ciales.....	804.05	3,071.36	2,027.78	80.17	1.76	.....	.....	6,429.19	6,644.99	794.20
Cidra.....	852.74	1,482.08	1,085.78	24.90	.....	.....	.....	2,222.63	2,222.63	1,128.13
Cosamo.....	2,625.83	3,732.46	1,895.15	68.70	14.00	.....	.....	8,338.13	4,731.60	8,036.53
Coroico.....	802.90	3,877.83	2,036.77	39.53	8.10	.....	.....	7,361.76	4,729.60	2,632.16
Coroico.....	34.23	848.89	745.68	9.31	.....	198.00	.....	681.44	1,024.13	645.33
Dorado.....	5,499.46	2,429.95	1,497.49	103.00	.....	.....	.....	9,499.91	2,523.11	6,976.80
Fajardo.....	2,553.99	7,096.74	3,154.02	45.81	9.00	.....	.....	14,162.16	9,686.14	9,476.02
Guadalupe.....	1,010.12	2,000.77	1,194.70	14.75	2.11	.....	.....	3,612.54	2,709.12	936.41
Guayama.....	6,352.56	2,196.02	1,408.99	83.49	.....	.....	.....	11,089.08	10,476.71	862.35
Guaynabo.....	1,284.03	8,383.64	4,070.62	20.67	.....	.....	.....	12,087.56	10,714.58	2,352.98
Guaynilla.....	1,286.00	8,867.49	2,019.76	47.63	.....	.....	.....	17,184.81	4,708.92	2,474.89
Gurabo.....	242.37	1,837.08	1,494.00	22.88	.....	.....	.....	4,508.66	3,315.64	1,419.59
Hatillo.....	286.96	2,689.10	1,626.06	32.83	2.92	.....	.....	6,621.95	1,581.57	6,000.39
Hormigueros.....	3,506.23	1,895.14	1,128.25	19.39	.....	.....	.....	13,140.50	12,235.26	905.33
Humacao.....	704.02	8,606.58	4,275.12	26.87	63.45	.....	.....	4,485.00	4,369.49	1,991.06
Isabela.....	671.80	2,321.48	1,456.68	20.98	42.00	.....	.....	3,931.91	2,253.71	1,796.28
Jayuya.....	1,865.28	2,014.22	1,400.87	42.51	6.24	.....	.....	6,042.99	13,137.05	8,195.16
Juncos.....	4,123.75	3,133.42	1,400.87	126.71	.....	.....	.....	13,137.05	6,510.04	8,225.83
Juncos.....	1,169.56	3,025.90	2,206.20	17.55	55.83	.....	.....	1,045.00	6,284.21	6,284.21

<sup>1</sup> The accounts of the school board of Bayamon for the months of January to June, 1918, both inclusive, and of Adjuntas for June, 1918, had not yet been received when closing this statement and, therefore, this table presents only those from July to December, 1917, both inclusive, in the first case, and from July, 1917, to May, 1918, both inclusive, in the second.

TABLE XI.—School-board finance—Receipts and expenditures, 1917-18—Continued.

Municipality.	Cash on hand June 30, 1917.	Receipts by the school-board treasurers.						Retained by Insular treasurer for repayment of loans.	Aggregate resources.	Aggregate payments, including those retained by Insular treasurer.	Cash balance June 30, 1918.
		School fund.	School tax.	Miscellaneous.			Total receipts, including balance.				
				Interest on deposits.	Reimbursements.	Gifts.					
La Osa.....	\$274.66	\$3,570.96	\$2,210.07	\$35.78			\$6,360.47		\$3,598.62	\$2,791.85	
Lares.....	2,785.93	5,166.37	2,737.88	66.45	\$3.50		10,760.03		7,688.32	3,071.71	
Las Marias.....	4,564.63	3,363.92	1,569.57	86.32			9,365.44		4,791.61	4,603.83	
Las Piedras.....	2,542.79	1,804.12	1,045.62	16.12	38.68	\$20.00	5,057.28		8,410.15	2,087.06	
Ledra.....	4,533.89	5,867.02	1,945.62	108.09	25.00		10,665.00		8,896.42	1,768.58	
Luquillo.....	1,710.63	1,941.69	663.44	13.24	49.70		10,098.98	\$54.38	2,080.44	967.91	
Manati.....	1,316.46	5,162.63	3,222.69	57.60		\$300.00	6,741.43		6,410.73	300.70	
Maricao.....	1,660.27	3,364.45	1,014.49	26.19			3,843.57	\$380.67	3,672.54	719.14	
Mauabo.....	1,960.52	3,964.67	1,164.95	26.19			49,668.56	8,547.78	28,524.38	81,404.68	
Mayaguez.....	31,076.86	9,963.28	9,164.95	665.05	64.31		3,228.28	286.50	1,963.67	1,581.21	
Moca.....	481.51	1,744.73	946.54	16.45			2,860.09		2,783.39	67.76	
Morovis.....	366.68	1,644.74	860.74	17.93			4,644.10	2,178.00	6,466.82	233.28	
Naguabo.....	765.67	1,624.28	1,862.37	11.83		50.00	1,679.42	163.44	1,842.86	847.33	
Negundo.....	446.20	640.09	617.35	16.78			7,511.57		9,964.18	1,947.39	
Negundo.....	2,405.85	3,068.09	1,504.72	65.80	2.25		4,051.99		3,820.79	261.20	
Pailon.....	2,298.05	2,554.14	1,240.58	17.85	163.68	10.00	30,011.00	26,635.00	53,648.00	3,723.74	
Panama.....	1,097.13	17,039.53	17,039.53	97.15	21.38		2,846.42	480.69	2,365.03	757.24	
Ponce.....	1,162.52	1,647.57	1,082.61	16.78	21.38		6,714.15		4,923.27	1,790.88	
Quebradillas.....	569.96	1,647.57	1,082.61	16.78	2.69		25,635.00		17,134.10	8,500.90	
Rio Grande.....	1,075.78	3,400.89	2,108.51	41.41			2,547.69		2,547.69	8,463.68	
Rio Piedras.....	10,081.51	9,968.87	5,135.98	140.33	12.89		11,954.69		10,084.11	1,379.58	
Sabana Grande.....	145.90	1,630.64	1,460.46	12.89	15.00		20,172.13		14,678.39	5,493.74	
Selinas.....	6,289.26	9,465.85	4,307.62	104.80			11,954.69		9,298.52	2,166.17	
San German.....	3,531.23	5,261.14	3,091.53	90.94			403,890.46	43,066.67	394,121.26	142,905.57	
San Juan.....	28,962.77	5,261.14	3,091.53	8,317.08	95.00		3,379.36		3,903.70	885.70	
San Lorenzo.....	331,493.78	1,576.52	1,288.51	2,083.70	20.55		11,294.81		7,163.47	4,122.34	
Santa Isabel.....	8,060.04	4,493.67	2,083.70	92.39			16,310.13		10,262.26	6,047.88	
Santa Rosa.....	1,595.44	5,135.56	2,967.70	153.74			4,305.54		2,761.84	1,543.70	
Tos Alta.....	3,105.86	1,632.37	1,045.10	42.55			10,037.67		7,074.31	2,963.36	
Trujillo Alto.....	1,633.11	4,390.06	2,450.50	79.15			4,909.61		5,161.38	2,632.29	
Utuado.....	4,428.74	1,999.38	1,244.63	42.49			11,727.51	251.77	10,975.41	3,197.10	
Vega Alta.....	2,078.94	4,227.74	2,962.48	62.12	46.43		6,125.14	2,445.00	4,789.87	1,833.07	
Vega Baja.....	6,643.48	3,881.46	1,962.91	46.03			7,206.44	497.80	6,622.94	1,999.43	
Vieques.....	10,168.63	6,282.31	2,652.42	20.06			20,576.87	7,917.38	9,831.68	10,645.19	
Villalba.....	1,307.44	1,233.32	3,916.07	215.42	20		2,078.39	1,054.43	1,023.96	1,383.23	
Yabucoa.....	1,664.04	4,744.90	3,410.11	55.40			9,819.48		8,436.25	1,353.92	
Yauco.....	3,207.71	5,910.60	3,268.11	18.52	60.00	2.03	9,601.67		9,601.67		
Total.....	528,867.55	307,771.04	216,448.05	13,099.32	1,024.05	769.03	\$30,000.00	1,097,976.07	838,074.57	367,026.98	

TABLE XII.—*School board finances—Expenditures classified, 1917-18.*

Municipality.	Rent of school-houses.	Salaries employes of school board.	Contingent expenses of school board.	School furniture and equip-ment.	School and athletic material.	Payments for construction of school buildings by school boards.	General expenses.	Total.
A	C	D	E	F	G-13	G		
Adjuntas.....	\$1,760.00	\$1,142.92	\$144.39	\$462.06			\$520.91	\$4,030.28
Aguada.....	1,170.00	1,546.97	220.68	835.03		\$33.47	1,946.15	5,762.30
Aguadilla.....	1,488.00	1,192.44	29.50	2,167.01	\$7.11		690.59	5,674.65
Aguaa Buenas.....	324.00	265.08	54.55	305.12		57.00	270.44	1,276.19
Albionito.....	796.00	554.30	122.32	568.54			460.32	2,601.48
Atasco.....	1,351.00	1,149.65	151.97	570.15		95.86	805.76	3,924.39
Arecibo.....	3,115.50	5,257.22	376.15	2,244.07	26.15	11,010.10	3,763.49	25,802.68
Arroyo.....	849.00	789.91	227.76	701.43		205.57	966.28	3,739.95
Barceloneta.....	1,764.00	1,261.33	223.50	992.68		4,518.88	498.60	9,259.04
Barranquitas.....	384.00	332.64	28.75	673.50		268.90	340.20	2,027.99
Barros.....	768.00	403.40	42.73	874.53		52.00	505.53	2,646.19
Bayamon.....	2,555.50	1,003.93	33.70	1,233.97			731.78	5,568.88
Cabo Rojo.....	3,198.00	1,539.56	148.55	1,579.27	75.18		890.91	7,431.77
Caguas.....	5,888.50	2,653.50	56.34	3,483.17	67.00		281.05	13,979.20
Camuy.....	1,189.00	1,126.71	225.08	1,052.52			1,879.87	5,734.40
Carolina.....	1,701.50	1,448.55	119.27	1,834.05	47.50		1,269.02	6,645.92
Cavey.....	2,734.00	1,383.63	261.04	606.53			1,341.87	35,632.44
Celba.....	960.00	264.74	151.16	542.22		29,815.37	1,466.65	2,134.54
Cidra.....	1,606.00	770.45	190.17	273.44		69.79	510.81	5,150.87
Clares.....	1,100.00	244.62	123.05	223.70			298.00	1,987.87
Coamo.....	2,190.00	789.26	61.13	1,364.67			386.54	4,731.60
Comerio.....	893.50	1,107.11	291.51	799.37			829.05	4,148.16
Corozal.....	162.00	298.17	22.44	313.35	10.50	217.12	397.92	1,193.88
Dorado.....	1,268.80	357.68	134.69	321.73	30.79		409.42	2,521.11
Fajardo.....	2,112.00	2,764.39	117.73	2,367.02			1,125.00	8,486.14
Guainabo.....	1,236.00	435.95	158.10	461.87		58.50	358.71	2,709.13
Guánica.....	3,080.52	2,806.88	174.19	1,390.72	115.53	4,302.27	796.62	10,476.71
Guayama.....	3,080.00	2,219.97	276.96	2,582.31	2.25	1,680.69	872.40	10,714.58
Guayanilla.....	1,158.00	1,217.26	99.25	801.97			1,119.80	4,396.28
Gurabo.....	1,830.00	684.79	57.79	142.18		230.81	221.05	3,166.62
Hatillo.....	396.00	684.50	99.95	537.52		890.19	707.48	3,315.64
Hormigueros.....	753.00	302.32	145.86	83.67			276.72	1,561.57
Humacao.....	2,020.00	1,942.64	254.18	1,851.09	26.83		1,585.52	7,750.26
Isabela.....	1,305.00	533.07	149.17	990.32	17.65	715.77	404.60	4,115.58
Jayuya.....	1,680.00	437.54	80.50	721.17			364.50	3,283.71
Juana Diaz.....	1,077.00	1,730.77	191.47	592.35	57.82	192.86	1,140.62	4,982.89
Juncos.....	2,488.10	1,160.96	172.39	710.11		67.50	642.15	5,239.21
Lajas.....	968.00	664.91	223.72	262.02		958.75	521.22	3,598.63
Lares.....	2,501.00	1,475.02	172.63	1,706.13		974.24	859.30	7,688.32
Las Marias.....	1,144.00	891.92	176.57	455.13		1,433.08	690.91	4,791.61
Las Piedras.....	874.00	671.31	180.90	637.34		577.00	469.60	3,410.15
Loiza.....	2,112.00	878.44	140.99	1,751.08	60.75	410.09	536.07	6,889.42
Luquillo.....	1,272.00	336.40	125.81	155.90			135.95	2,026.06
Manati.....	2,532.00	1,380.55	234.98	893.35	87.81	27.41	1,001.90	6,158.00
Maricao.....	1,206.00	1,466.93	148.38	456.25		2,112.68	1,020.49	6,410.73
Maunabo.....	678.00	758.96	147.87	630.42	27.70		381.78	2,624.73
Mayaguez.....	1,116.00	4,597.19	174.89	2,579.93	1,047.99	5,428.77	3,334.11	18,278.88
Moca.....	696.00	309.62	70.77	228.06			402.62	1,707.07
Morovis.....	792.00	570.90	124.58	606.17		60.00	538.68	2,782.33
Naguabo.....	1,605.00	974.38	78.45	435.73		658.99	568.27	4,320.82
Naranjito.....	276.00	159.62	48.10	124.36			224.02	822.10
Patillas.....	1,704.00	806.89	235.36	2,310.13			507.80	5,564.18
Penuelas.....	1,391.00	668.64	75.00	982.77		367.16	336.18	3,820.75
Ponce.....	5,038.40	7,572.38	260.09	4,919.87	29.05	6,010.56	2,446.90	26,277.25
Quebradillas.....	645.00	255.95	52.92	934.05	12.77		367.58	2,268.27
Rincon.....	972.00	740.19	38.68	726.30			251.61	2,728.78
Rio Grande.....	1,387.00	1,159.79	117.91	665.79		595.00	606.87	4,532.36
Rio Piedras.....	1,248.00	4,910.07	76.78	1,698.77	5.00	7,692.13	1,503.35	17,134.10
Sabana Grande.....	1,068.00	388.31	44.26	191.67		51.43	340.44	2,084.11
Salinas.....	672.00	3,334.60	67.52	186.84		9,861.56	555.87	14,678.39
San German.....	1,833.75	1,918.73	309.74	2,397.57	138.29	1,099.75	1,600.69	9,298.52
San Juan.....	7,102.00	14,536.00	634.97	21,813.59	1.50	210,461.36	6,505.17	261,054.69
San Lorenzo.....	1,246.00	1,024.77	44.29	376.78		25.38	426.44	2,493.66
San Sebastian.....	2,063.00	3,665.82	98.71	783.35		2,353.55	798.04	7,162.47
Santa Isabel.....	96.00	2,727.40	44.16	219.83		6,327.34	847.52	10,262.25
Toa Alta.....	300.00	853.44	141.48	1,652.64		7.75	306.53	2,761.84
Toa Baja.....	1,240.00	1,395.83	246.22	799.32	4.79	1,666.91	1,721.24	7,074.31
Trujillo Alto.....	756.00	487.43	85.36	841.63		58.30	548.60	2,277.32
Utuado.....	2,958.00	1,279.22	186.89	801.55	98.43	2,615.30	591.02	8,530.41
Vega Alta.....	510.00	879.34	54.41	826.48		939.81	1,062.03	4,292.07
Vega Baja.....	1,487.00	962.19	114.03	892.53	49.75	710.28	1,021.23	5,207.01
Vieques.....	982.00	1,642.53	96.85	1,790.94		5,011.10	497.96	9,931.68
Villalba.....	858.00	76.43					120.00	1,064.43
Yabucoa.....	2,961.50	2,361.69	156.13	918.34	392.19		1,746.40	8,436.75
Yauco.....	1,638.00	2,077.14	325.14	2,323.83	139.61	692.01	1,022.02	8,217.75
Total.....	116,188.57	110,736.27	10,973.51	98,560.83	2,589.94	325,557.29	66,340.68	730,947.09

TABLE XIII.—*Receipts and expenditures.*

## RECEIPTS.

To balance deposited in the American Colonial Bank, Royal Bank of Canada, and Banco Comercial de Puerto Rico in favor of the school boards, June 30, 1917.....	\$528,867.58
Total amount received by treasurers of school boards from July 1, 1917, to June 30, 1918:	
School fund.....	\$307,771.04
School tax.....	216,445.05
Interest on deposits.....	13,099.32
Reimbursements.....	1,024.05
Gifts.....	769.03
Loan funds.....	30,000.00
	569,108.49
Total amount retained by the treasurer of Porto Rico during the fiscal year 1917-18 in payment of loans and for the construction of schoolhouses.....	107,127.48
Total.....	1,205,103.55

## DISBURSEMENTS.

Payments made during the fiscal year 1917-18:	
Rent of schoolhouses.....	116,188.57
Salaries of employees.....	110,736.27
Contingent expenses, school boards.....	10,973.51
Equipment and furniture.....	98,560.83
School and athletic material.....	2,589.94
Construction of school buildings.....	325,557.29
General expenses.....	66,340.68
Total.....	730,947.09
Amount paid on account of loans and for the construction of schoolhouses.....	107,127.48
Balance.....	367,028.98
Total.....	1,205,103.55

To balance deposited in the American Colonial Bank, Royal Bank of Canada, Banco Comercial de Puerto Rico, and Crédito y Ahorro Ponceño to the credit of the school boards, June 30, 1918.....	367,028.98
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## COMPARATIVE STATEMENT.

Fiscal year.	Balance on hand June 30.	Total income including balance.	Total expenditures.	Indebtedness from former years.
1903-4.....	\$8,831.93			\$51,368.65
1904-5.....	25,396.27	\$245,760.53	\$220,364.26	27,342.14
1905-6.....	43,878.24	304,093.94	260,815.70	9,215.27
1906-7.....	88,592.75	346,451.79	257,859.04	1,911.75
1907-8.....	116,438.16	504,481.26	388,043.10	
1908-9.....	127,213.59	564,699.57	437,485.98	
1909-10.....	143,074.26	562,236.15	419,161.89	
1910-11.....	181,622.07	585,613.64	408,691.57	
1911-12.....	269,881.17	700,862.38	430,981.21	
1912-13.....	265,920.43	845,264.38	679,343.95	
1913-14.....	273,566.18	1,001,731.48	728,165.30	
1914-15.....	319,475.18	912,154.72	592,679.54	
1915-16.....	260,069.21	812,422.89	552,353.68	
1916-17.....	554,742.40	1,211,018.45	656,276.05	
1917-18.....	367,028.98	1,205,103.55	838,074.57	

TABLE XIV.—*School and home gardens.*

Municipalities.	Number of rural school gardens.	Number of urban school gardens.	Number of cuerdas cultivated in gardens.	Number of rural schools without gardens.	Home gardens, urban.	Home gardens, rural.	Number of agricultural exhibits.
San Juan.....							
Rio Piedras.....	21	1	17		23	865	
Trujillo Alto.....	10	1	15		5	325	
Carolina.....	21	1	5	2	114	218	
Rio Grande.....	17		5	3	49	493	1
Loiza.....	19		4	1	67	504	
Fajardo.....	9	8	1.25	1	64	144	
Ceiba.....	7	1	1.50	1	22	86	
Luquillo.....	8	1	1.75	1	89	160	
Naguabo.....	13		5.50	6	32	114	
Vieques.....	9		3.25	1	23	46	1
Humacao.....	18	2	9.75	6	36	420	
Las Piedras.....	12	2	8.20	1	12	160	
Yabucoa.....	24	1	3	2	30	370	
Maunabo.....	9		1.50	1	70	80	
Arroyo.....	10	1			49	86	
Patillas.....	16		2.15	1	35	151	
Juncos.....	10	5	8.75	3	5	25	
Gurabo.....	13	4	4.50	1	4	30	
Caguas.....	29		2.50	3		244	3
San Lorenzo.....	15		2.25	2		256	
Guayama.....	19	1	8		125	175	
Salinas.....	7	2	2	7	43	80	
Santa Isabel.....	5	2	4	4	15	75	
Caye.....	21		1.75		32	255	
Cidra.....	12	1	7		22	163	
Comerio.....	9	1	2.90	1	11	94	1
Agua Buenas.....	13	1	2.15	1	15	100	
Naranjito.....	12	1	2.60		8	100	
Aibonito.....	13	1	4	1	15	102	3
Barranquitas.....	13	1	4		20	120	
Barros.....	29	1	4.75	1	66	361	
Coamo.....	26	1	7.50	2	51	165	
Juana Diaz.....	26	1	7	2	25	150	
Villalba.....	19		5		12	85	
Ponce.....	49	2	10.50	1	793	673	1
Guayanilla.....	18	1	3.75	1	8	150	
Peñuelas.....	18	1	2.75	1	9	126	1
Yauco.....	38	2	7.50		235	750	1
Guánica.....	5		3.00		190	166	1
San German.....	35	2	3.75	1	150	539	1
Sabana Grande.....	4		10.50	5	95	199	
Cabo Rojo.....	24	1	3.50	1	281	684	
Lajas.....	21		6.00	1	122	319	
Mayaguez.....	31	5	6.50	3	460	430	
Hormigueros.....	6		1			92	
Maricao.....	17	3	8.50		71	510	1
Las Marias.....	21	2	6	1	20	505	
A lasco.....	21	2	4.25		174	250	1
Rincon.....	11	1	2.50	1	26	165	
Aguada.....	18		3		87	220	
Lares.....	29	1	7.15		27	518	
San Sebastian.....	26		8.50		185	957	
Aguadilla.....	18	2	9.15		104	672	1
Moca.....	15	1	6.15		44	276	1
Isabela.....	23	1	7.25	1	44	300	3
Quebradillas.....	11	1	3.75	3	43	132	2
Utado.....	41	2	6.25	2	100	1,010	
Adjuntas.....	23		6.75	1	62	400	
Jayuya.....	15		2.25	1	42	213	
Camuy.....	13	1	2.50	1	160	115	
Hatillo.....	10		2.25		140	145	
Arecibo.....	46	1	10.40	11	12	650	
Manati.....	21	1	4.50		1	183	1
Barceloneta.....	9	1	2.75	2		175	
Ciales.....	27	1	3		80	520	1
Vega Baja.....	17		8	1	35	377	
Vega Alta.....	9		3		50	237	
Corozal.....	15	1	6		8	308	
Morovis.....	19		7		7	210	
Tos Baja.....	11	1	3.25	3	193	284	
Tos Alta.....	16	1	8.50		141	273	
Dorado.....	10		1.25	1	74	245	
Bayamon.....	22	1	6.50	1	36	205	
Guatimbo.....	13	1	3	1	20	102	
Culebra.....				1			
Total.....	1,312	83	374.60	103	5,548	21,145	25

TABLE XV.—Community and war propaganda.

Municipalities.	Number of Comites de Fomento Agrícola.	Meetings held by Comites de Fomento Agrícola.	Number of parents associations.	Meetings held by parents associations.	Number of visits to rural homes.	Number of rural conferences.	Number of pledge cards signed, food campaign.
San Juan.....	16	30	6	18	654	42	6,000
Rio Piedras.....	7	14	4	8	645	20	3,000
Trujillo Alto.....	19	34			508	34	1,000
Carolina.....	14	12	14	26	600	12	1,108
Rio Grande.....	12	15			800		1,000
Lolita.....	8	12			720	8	1,000
Fajardo.....	7	10			280	7	423
Calbe.....	8	8			190	5	463
Luquillo.....	13	13	16	30	645	14	1,200
Naguabo.....	10	10	9	13	180	10	1,700
Vieques.....	18	44			412	24	2,025
Humacao.....	13	32			844	14	1,500
Las Piedras.....	19	40			1,250	60	2,500
Yabucoa.....	7	7			450	15	872
Maunabo.....	12	18	1	1	295	6	900
Arroyo.....	14	19	1	1	175	12	1,200
Patillas.....	13	25	13	8	450	40	3,500
Juncos.....	14	20	14	12	175	36	2,000
Gurabo.....	29	97	19	29	937	60	3,200
Caguas.....	15	76	15	25	1,110	43	1,000
San Lorenzo.....	10	10	18	11	850	24	1,500
Guayama.....	7	7			455	7	1,400
Salinas.....	7	7			290	4	1,200
Santa Isabel.....	21	38	23	23	700	38	1,300
Cayey.....	12	24			500	24	1,000
Cidra.....	16	14			960	6	922
Comerio.....	10	8			600	12	800
Aguas Buenas.....	12	10			720		1,005
Naranjito.....	13	78	1	6	240	18	800
Albionito.....	13	78			165	18	600
Barranquitas.....	31	64			510		1,239
Barros.....	15	22	16	34	560		1,400
Coamo.....	9	4			900	4	2,300
Juana Diaz.....	13	10			700	4	700
Villalba.....	50	212	50	232	2,420	132	15,000
Ponce.....	18	18	13	13	1,000	9	1,000
Guayanilla.....	17	17	17	23	1,000	28	1,000
Peduelas.....	38	38	38	38	2,020	38	3,025
Yauco.....	13	13	13	13	600	18	1,550
Guanica.....	25	25	35	26	4,805	146	3,000
San German.....	16	16	18	22	990	47	2,359
Sabana Grande.....	21	26	48	23	250	23	
Cabo Rojo.....	15	17	30	25	510	15	
Lajas.....	15	75	25	120	1,892	22	
Mayaguez.....	5	12	6	18	281	12	
Hormigueros.....	17	28	18	45	2,148	43	941
Maricao.....	21	31	22	48	2,305	79	1,062
Las Marias.....	22	30	22	22	865	27	1,525
Añasco.....	10	10	10	6	480	6	1,000
Rincon.....	16	16	18	12	685	4	
Aguada.....	28	40	29	15	1,500	90	2,519
Lares.....	25	100	25	90	1,200	79	2,349
San Sebastian.....	18	56	14	26	1,500	32	1,450
Aguadilla.....	15	20	8	30	800	1	1,000
Moca.....	25	19	6	15	1,190	26	1,610
Isabela.....	11	8	4	7	684	5	884
Quebradillas.....	41	50	41	45	1,500	205	3,200
Utundo.....	23	115			675	46	1,393
Adjuntas.....	15	48			300	23	
Jayuya.....	13	18	6	12	850	10	1,620
Camuy.....	10	15	10	20	458	30	
Hatillo.....	24	33	39	15	2,000	30	4,960
Arecibo.....	21	54			813	23	1,825
Manati.....	7	17			288	9	
Barceloneta.....	8	50			180	30	1,000
Ciales.....	18	65	18	8	564	35	1,200
Vega Baja.....	8	31	8	5	388	31	
Vega Alta.....	17	35	17	22	450	35	1,800
Corozal.....	19	30	19	26	290	30	
Morovis.....	8	20	8		297	47	760
Toa Baja.....	16	18	10	10	517	25	458
Toa Alta.....	6	7	6		220	13	1,220
Dorado.....	18	25	10	10	1,200	30	2,300
Bayamon.....	10	12			425	12	700
Guainabo.....							
Total.....	1,177	2,380	831	1,297	60,088	2,157	122,826

## REPORT OF THE PRESIDENT OF THE BOARD OF TRUSTEES AND CHANCELLOR OF THE UNIVERSITY OF PORTO RICO.

The University of Porto Rico comprises the normal department, the College of Liberal Arts, Law, and Pharmacy, the University High School, and the Practice School, which is attended by elementary school pupils, all located at Rio Piedras, and the College of Agriculture and Mechanic Arts situated at Mayaguez.

## RIO PIEDRAS DEPARTMENTS.

Advantageous improvements have been made during the past year in buildings, grounds, and material equipment. The pharmacy department has been moved into large and well-lighted rooms of the memorial building, where it is in close proximity to the physics and chemistry laboratories and where it is fully equipped with the proper laboratory conveniences and necessities. The fitness of the biology laboratory has been greatly increased.

The library accommodations have been improved by the removal of the books from the reading room to an adjoining stack room. The library is now being reorganized to conform to the Dewey system.

At the sacrifice of some classroom space, the Practice School has been provided with a suitable assembly hall.

In spite of these changes the university is still sadly in need of more and better buildings.

Many students of the university have entered the teaching profession this year by taking special examinations or by securing temporary licenses.

The war activities of the university may be summarized as follows:

(1) Propaganda in the classroom in favor of the cause of the allies, of the Red Cross, and of the several war activities of the country.

(2) Giving publicity to literature and posters pertaining to the war.

(3) Special assemblies, addresses, and entertainments on topics related to the war.

(4) Reorganization of work in home economics to give special courses on food conservation and war-time economy, for the making of articles of clothing for war use, and to train prospective home economics teachers for organizing and conducting war service along these lines in the public schools.

(5) Red Cross instructors' class. Instructors' course in surgical dressings given to young ladies of the graduating class of the Normal College to prepare them to organize and conduct similar classes after entrance into the service as teachers.

(6) Members of the university body in military service. The list of former members of the student body or faculty of the university who are now in some branch of the National Army at present includes 32 names. These men are all volunteers, none having been drafted yet.

(7) Contributions of money:

(a) Liberty bonds purchased through the university by faculty and student organizations.....	\$300. 00
(b) Liberty Bonds purchased by students or members of the faculty individually.....	(1)
(c) Gifts to the Red Cross through the university students, members of the faculty, or special university organizations.....	480. 95
(d) Funds collected for junior membership in the Red Cross.....	105. 00
(e) Purely individual contributions to the Red Cross by students and members of the faculty.....	(1)
<b>Total.....</b>	<b>865. 95</b>

For physical examinations and medical attendance the university now employs two physicians—a man for male students and a woman for female students.

A number of faculty committees have been appointed to deal with scholarship, discipline, student life and activities, publicity, buildings and grounds, and library. The science division of the faculty has been organized thoroughly by departments, and a central supply organization has been put into effect to provide properly for inventories, the transfer of apparatus and equipment among departments, and the purchase of new supplies.

The first steps in a self-survey of the university have been taken at the end of the year in securing from each member of the faculty a synopsis of each course offered by him during the current year and detailed comments and suggestions concerning the local administration of the university in all its details.

<sup>1</sup> Amount not ascertained.



The first steps in a program for the articulating of the university with the public-school system were taken when questionnaires were distributed to all supervisors of schools and to former students of the normal school of the university who are now teaching in the public schools. These questionnaires were devised with a view to securing the criticisms of former students and of representatives of the public-school system on the courses now offered at the university for the training of teachers. A second step was taken when circular letters were sent to supervisors of schools, high-school principals and high-school teachers, and to all students graduating from high schools this year, with information concerning the courses offered in the various colleges and with reference to certain points of special importance in the university announcement for the coming year.

Various changes for the coming school year have been made, of which possibly the most important are: Reorganization and further systematization of the courses of study in the Colleges of Law and Pharmacy; the elimination of the commercial course from the University High School; the adoption of a plan for the elimination within two years of the four-year course in the Normal School; the raising of the tuition fees in the Colleges of Pharmacy and Law to \$50 per year and the imposing of a fee of \$10 per year in the University High School; and the adoption by the faculty, with the approval of the chancellor and the board of trustees, of a comprehensive and detailed set of rules and regulations governing students and regulating certain phases of the local administration of the university.

Plans for improvement and extension, including the development of the College of Liberal Arts; the organization of a school of education, a school of medicine, and a school of commerce; and the effecting of a scheme of cooperation with universities and colleges of the United States for the preparation of teachers of Spanish and of commercial students entering the field of Latin-American commerce can not be put into effect until the university has more and better buildings and material equipment and sufficient funds for increasing the faculty. There is great need for legislation to place the university on a stable financial basis by designating a permanent and fixed source of revenue for the university and freeing the institution from the uncertainty of relying upon special legislation at each session of the legislature.

The most immediate problems connected with the development of the university are financial.

#### COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

The College of Agriculture and Mechanic Arts has had a year of steady progress in spite of the same interruptions that have been experienced by all educational institutions since the entrance of our country in the war. The requirement for admission has been raised one year, giving a distinctly older and more serious tone to the whole student body, but resulting in a lower total enrollment, 204 in place of 290 as last year. It was again called upon to supply manual training teachers to fill the gaps in the teaching force of the public-school system, gave up students who went into the extension work of the United States Experiment Station as agricultural agents, furnished a full quota of candidates for three training camps for officers, and suffered the most serious loss when eight of the faculty resigned in one week, six to go into the training camp, one into the Y. M. C. A. work, and one to be director of the insular experiment station. To all of these demands it has responded with the utmost loyalty and to the best of its ability. The loss of one-third of its faculty at one time necessitated the use of student instructors, an experiment which succeeded beyond expectation. All of the senior and junior classes of sugar chemists were sent out to help in the laboratories of the sugar companies, and without exception have done well. In short, there has never been a time when the training given at the college received such recognition and when the demands for its men were far beyond its power to fill. Naturally, this demand has had a favorable reaction on the student body, as a very practical demonstration of the monetary value of thorough work.

Of the three forms of activity in which colleges of this character are engaged—instruction, research, and extension—only the first is properly the function of the college as at present organized. The Federal and insular experiment stations in Porto Rico are each distinct organizations to which the functions of research and extension naturally belong. The importance of instruction in agriculture, particularly in a country where lack of other resources makes the land the sole basis of wealth, is so great, while the funds available are so limited, that attention has been directed to this end.

Experimental work has been carried on in testing vegetables under tropical conditions; in raising Belgian hares as a possible cheap meat supply for the Tropics; in poultry, which plays such an important part in the food supply of all warm countries; and in forage and cover crops. In March a very successful three days' Agricultural Congress was held in connection with the United States Experiment Station, the

insular experiment station, and the food commission to arouse the interest in a greater food supply grown in the island. This was the first time that the men engaged in practical agriculture gathered together to talk over their problems and the best solutions. So great was the interest that steps have been taken to organize a general agricultural association under whose auspices similar meetings will be held at frequent intervals in various parts of Porto Rico.

The difficulties due to the lack of buildings have unfortunately not been remedied. The work of the institution has been seriously handicapped by this need, but for the present there seems no remedy in sight, due to indifference to the proper development of the fundamental basis of all wealth of the island—scientific agriculture. Due to the same cause it has been impossible to carry out the plan for holding classes 12 months of the year. A start has, however, been made on a small scale as an augury of the future.

#### *Enrollment 1917-18.*

<b>Rio Piedras departments:</b>	
College of Liberal Arts.....	14
Normal School.....	232
College of Law.....	31
College of Pharmacy.....	15
University High School.....	216
Summer school.....	115
Practice school.....	285
<b>Total.....</b>	<b>908</b>
<b>College of Agriculture and Mechanic Arts:</b>	
College proper.....	77
Subcollegiate courses.....	127
Summer school.....	156
	360
Deduct names counted twice.....	11
<b>Total.....</b>	<b>349</b>
<b>Grand total.....</b>	<b>1,257</b>

#### **CERTIFICATES, DIPLOMAS, AND DEGREES GRANTED.**

<b>Rio Piedras departments:</b>	
College of Liberal Arts: Bachelor of science in chemistry.....	1
College of Law: Bachelor of law.....	13
<b>Normal department—</b>	
Four-year course diploma.....	42
Rural teachers' certificate.....	30
High school diploma.....	51
<b>Total.....</b>	<b>137</b>
<b>College of Agriculture and Mechanic Arts:</b>	
Bachelor of science in agriculture.....	2
Bachelor of science in civil engineering.....	3
Bachelor of science in mechanical engineering.....	1
Bachelor of science in sugar engineering.....	3
Subcollegiate diploma in agricultural science.....	8
Subcollegiate diploma in polytechnic science.....	12
<b>Total.....</b>	<b>29</b>
<b>Grand total.....</b>	<b>166</b>

#### **REPORT OF THE PRESIDENT OF THE BOARD OF TRUSTEES OF THE CARNEGIE LIBRARY.**

The board of trustees has been reorganized pursuant to an act of the legislature approved November 22, 1917. Two women are members of the reorganized board.

The accessions during the year have been 3,213 books, distributed as follows: Spanish books—by purchase, 304 fiction, 363 nonfiction; by gift, 45. English books—by purchase, 1,201 fiction, 1,168 nonfiction; by gift, 132.

The number of patrons of the library is constantly increasing as the people appreciate its benefits. It has reached a daily average of 180, not counting the children who have come during the school year for classes in story telling. The benefits of the library have been increased by allowing people from the different towns of the island to take out books, provided they pay the transportation charges. However, its sphere of usefulness has been greatly enlarged by the establishment of a traveling library system, which extends its benefits to the people who live in intellectually isolated places where almost no reading matter has heretofore been available except school textbooks. That these traveling libraries are duly appreciated is shown by the fact that in 20 towns enthusiastic citizens have assumed responsibility for them without compensation. It is expected that this new phase of the library's service will be further extended the coming year, and it is sincerely hoped that the legisla-

ture will soon provide sufficient funds for a complete and efficient traveling library system, with central offices in San Juan and branches in every town. It will thus become truly an insular library.

Another activity for which the library should receive due credit is its help to the Porto Rico Chapter of the American Red Cross, to whom it has given the constant use of two rooms and has lent its lecture room for meetings and conventions.

The library has also become a rendezvous for various associations, such as the "Sociedad Protectora de Mendigos" and the "Asociación Médica de Puerto Rico."

A special concession has been made to teachers who are permitted to use the books from the library for the entire school year in certain cases—a privilege heretofore not granted by the institution.

In order to make the library better known to the people and get them more interested in its use, a campaign was taken up by the staff, consisting of publishing lists of new books in the papers of the island, as well as other advertisements regarding the institution, such as lectures, exhibitions, and meetings held there. The proprietors of several stores of the city of San Juan have generously cooperated by exhibiting in their show cases attractive posters and book covers of volumes recently received at the library. Classified lists of books have been sent to those who might be interested.

#### *Carnegie Library appropriations.*

Fiscal year 1917-18.	Credits.	Expenditures.	Balances.
Salaries.....	\$7,440.00	\$6,967.75	\$472.25
Incidentals.....	8,000.00	2,082.12	5,917.88
Total.....	15,440.00	9,049.87	6,390.13

#### STATEMENT OF EXPENDITURES.

<b>Personnel:</b>		
Librarian.....		\$1,500.00
Assistant Librarian.....		1,200.00
Cataloguer.....		671.25
Clerk (\$900).....		860.00
Clerk (\$900).....		702.50
Clerk (\$720).....		720.00
Clerk (\$600).....		595.00
Janitor (\$360).....		359.00
Janitor (\$300).....		300.00
		<u>\$6,967.75</u>
<b>Contingent expenses:</b>		
<b>Books—</b>		
Spanish.....	\$49.89	
English.....	299.68	
		<u>349.57</u>
<b>Periodicals—</b>		
Spanish.....	\$157.47	
English.....	199.50	
		<u>356.97</u>
Furniture.....		340.11
Lighting.....		450.60
Extra help.....		298.00
Sundries.....		286.87
		<u>2,082.12</u>
Disbursements.....		9,049.87
Balance.....		6,390.13
Regular appropriation for the year ending June 30, 1918.....		<u>15,440.00</u>

The large credit balance shown in the appropriation for "incidentals" is due to nonreceipt of books requisitioned during the year, also to some bills for materials already received which had not as yet been vouchered upon date of closing the fiscal year 1917-18 by the auditor of Porto Rico.

## APPENDIX VIII.

### REPORT OF THE ATTORNEY GENERAL.

OFFICE OF THE ATTORNEY GENERAL,  
*San Juan, P. R., August 20, 1918.*

HONORABLE GOVERNOR OF PORTO RICO:

I have the honor to submit herewith the annual report of the department of justice of Porto Rico for the fiscal year ending June 30, 1918.

The fiscal year 1917-18 has been the busiest and most interesting year since the organization of the department of justice. The exceptional demands made upon the department by reason of the great war have been largely responsible for this activity, but aside from the problems caused by the war there has been an unusual amount of work, especially in the office of the attorney general.

The year has been especially significant because of the following matters, which will be dealt with more extensively under appropriate headings in this report.

1. The question of the Territorial status of Porto Rico.
2. War activities of the department of justice of Porto Rico.
3. The work of the department of justice in the reorganization of the government of Porto Rico under the new organic act.
4. The exceptional amount of important legislation in which the people of Porto Rico had an interest during the year.

#### TERRITORIAL STATUS OF PORTO RICO.

By far the most important and interesting matter from a legal point of view were the decisions of the Supreme Court of the United States in the cases of *The People of Porto Rico v. Carlos Tapia*, and *The People of Porto Rico v. José Muratti*, decided January 21, 1918 (245 U. S., 639). In these two cases the Supreme Court of the United States in per curiam opinions reversed the decisions of the Supreme Court of Porto Rico and of the District Court of the United States for Porto Rico in the *Muratti* and *Tapia* cases, which were extensively dealt with in my last annual report. The decisions of the Supreme Court of the United States uphold the contention consistently maintained by this office that Porto Rico did not become an incorporated Territory of the United States by reason of the enactment of the new organic act by Congress, conferring citizenship upon the inhabitants of Porto Rico, and as a consequence the establishment of a grand jury for all infamous offenses and of a petit jury in civil and criminal cases was not forced upon Porto Rico, but was left to the discretion of the Legislature of Porto Rico.

In this connection the department of justice went through an interesting period between the time of the decisions of the District Court of the United States for Porto Rico and of the Supreme Court of Porto Rico, dated May and July, 1917, respectively, and the reversal of these decisions by the Supreme Court of the United States in January, 1918. Inasmuch as both the Supreme Court of Porto Rico and the Federal court had held that the Jones Act wiped out the criminal procedure by information of the district attorney established by the Codes of Porto Rico, and required a grand jury in all cases of infamous offenses, it was necessary to immediately take steps for the establishment of a grand jury pending the decision of the Supreme Court of the United States. The attorney general, while maintaining that the new organic act did not require a grand jury, nevertheless, was confronted with the possibility and probability of having every person held on information presented by the fiscal released in habeas corpus proceedings. Inasmuch as the legislature was not in session it was decided to organize grand juries in every district on common-law lines. This was done and more than a hundred indictments were returned by these grand juries before the decisions of the local courts were reversed by the Supreme Court of the United States. Copies of the circulars prepared by the attorney general containing the regulations for the organization of the grand juries are attached to this report, marked Exhibits 49 and 50. After the decision of the Supreme Court of the United States the question arose as to the legality of the proceedings and convictions based upon

indictments by these common-law juries, and the Supreme Court of Porto Rico in several cases sustained the convictions thus secured. This procedure was without legal precedent, but it enabled the department of justice to carry on with scarcely any interruption the administration of the criminal laws during the period of doubt as to the probability of an entire reorganization of our judicial system. The experience gained during this period shows that a grand jury may be successfully employed in Porto Rico, but that our system of municipal and district courts will have to be entirely reorganized in case grand juries are to be employed in all cases of infamous offenses, inasmuch as it is impossible to use grand juries in connection with all of the municipal courts, which have concurrent original jurisdiction with the district courts in all cases of misdemeanors, many of which are infamous offenses within the meaning of the fifth amendment to the Constitution of the United States. The result of this experiment of grand juries in Porto Rico and the prompt decision by the Supreme Court of the United States was that not a single felon escaped from the consequences of his crime, and the administration of the criminal law was not delayed. This situation is to be contrasted with the situation in Hawaii after that Territory was admitted as a part of the territory of the United States in accordance with the provisions of the treaty between Hawaii and the United States and the Newlands resolution approved by the Congress on July 7, 1898.

In the brief filed by the attorney general of Hawaii in the Supreme Court of the United States in the case of *Hawaii v. Mankichi*, 190 U. S., 197, it was stated:

"For about two years these courts have played battle-door and shuttle-cock with nearly every felon in the Territory convicted between the 12th day of August, 1898, and the 14th day of June, 1900. Under these conditions, a prompt and decorous administration of justice has been impossible."

#### WAR ACTIVITIES OF THE DEPARTMENT OF JUSTICE OF PORTO RICO.

From an administrative point of view the war work of the department of justice of Porto Rico during the last year holds the first place in interest. The most important of this work was the suppression of conditions of vice and prostitution in connection with the mobilization of the National Army from Porto Rico. This campaign, initiated in February, 1918, has resulted in the greatest success, and the many hundreds of convictions obtained and the reorganization of two of the district jails of Porto Rico into hospitals for the women convicted of violation of the laws of Porto Rico against houses of prostitution will have a continued and profound effect for many years to come. The results of this campaign are being felt at the present time. The campaign is still in progress and this matter will be the subject of a special report which will be submitted within a short time. The full report of this campaign more properly pertains to the annual report to be submitted for the year 1918-19. But it is proper to mention here that over 100 convictions for violation of the laws against prostitution were obtained prior to July 1, 1918, and since July 1, 1918, and up to August 20, 1918, the date of this report, over 600 additional convictions were obtained in which the sentences ranged from 6 months to 2 years.

The district jails of Arecibo and Ponce have been converted into two large jails and hospitals for women prostitutes, with capacity for more than 300 inmates at Arecibo and more than 400 inmates at Ponce. It is probable that in the near future the jail at Mayaguez will have to be reorganized along the same lines as those at Arecibo and Ponce, with a capacity for 600 additional inmates. All of the men prisoners have been transferred from the district jails at Arecibo and Ponce, women nurses and attendants have been employed, and adequate hospital facilities and medical treatment have been provided. The clinical and operating wards at each institution contain 14 operating tables, and the inmates suffering from venereal and constitutional diseases are being given the most modern and effective treatment for these diseases. Work is being provided for the women inmates in sewing, cooking, cleaning and gardening, and plans are now being made to provide for their instruction in hat making, basket making, lace and drawn work, and other activities. The American Red Cross and other voluntary organizations have been requested to help in this work, both at the institutions and in the home communities in preparing for useful and honorable occupations for these women after they have been cured and released from these institutions. The exact statistics in regard to the proportion of these women who are diseased are not yet available, but the preliminary examinations show that a very large proportion of them are suffering from disease. A careful medical examination is now being made and blood tests are being made by competent officials in the laboratories of the department of health and of the Army.

I wish to acknowledge my appreciation and thanks to the various officials and their subordinates who have cooperated in this work and have contributed so largely to its

success. I have written letters thanking many of them personally, but no report of this work is complete without stating their part in it. Among those who have contributed so effectively are: The chief of the insular police in the work of securing evidence; the commissioner of the interior in the work of repairing and equipping the hospitals of the jails; the commissioner of health in the furnishing of medicines and the services of nurses and doctors; the alcalde of Arecibo and the alcalde of Ponce in the rendering of similar assistance; the medical officers at Camp Las Casas and especially Lieut. Col. W. F. Lippitt and Lieut. Herman Goodman, who have aided in every possible way in the work of correction of conditions in the municipalities, in the inspection of the hospitals which have been established, in the treating of the patients and in suggestions to the doctors, nurses, and attendants who have been employed at the hospitals; the commanding officer at Camp Las Casas, Col. Orval P. Townshend; the local chapters of the Women's Christian Temperance Union; the American Red Cross and other voluntary organizations; and lastly to the other officials of the department of justice of Porto Rico, including the district attorneys, the municipal and district judges and the justices of the peace, and the superintendent of prisons. A copy of a circular sent out in connection with this campaign is attached hereto marked "Exhibit 51."

In connection with the campaign against prostitution an effective campaign has been waged to promote the legal marriages of persons who have been living under the status usually known as the common-law marriage. A copy of the circular sent out in this connection which has resulted in thousands of marriages is attached hereto as Exhibit 52.

An effective campaign is being carried on against violations of the prohibition law of Porto Rico, which is dealt with at another place in this report.

Most valuable service has been rendered by a large number of officials of the department as members of the local boards of exemption, as assistants to the district board, and as representatives of the Provost Marshal General. The superintendent of prisons has acted as chief clerk of the district board of exemptions for many months, and the inspector of prisons is now acting in that capacity. One of the law officers of this office acted as an assistant to the United States attorney and took part in many important cases until he entered the officers' training camp and received his commission as a captain in the National Army.

The department has aided through its large and efficient personnel in the work of the Red Cross, the Liberty loans, the vigilance societies, the Four-Minute Men, the food commission, and numerous other war activities. The loyal, patriotic, and efficient help of the officers of the department, judges, district attorneys, and other officials in their various activities is worthy of the greatest praise and the fullest recognition. There are altogether under the direct jurisdiction of the department of justice about 550 officers and employees, and the department has supervision over the work of hundreds of municipal officers and employees in connection with the civil registry and the municipal jails. This large organization has been imbued with a spirit of patriotism and zeal for war work which has been a strong contributing factor to the splendid showing which has been made by Porto Rico in all lines of war activities. A large number of officers and employees have entered the Army as officers or privates. From the office of the attorney general alone during the last year four men received commissions as graduates of the training camps for officers, three of them as captains and one as a first lieutenant, and three others entered the training camps and hope to receive commissions. From the department as a whole dozens of men have received commissions or are serving as privates or noncommissioned officers in the National Army, and many others made application for enlistment in the officers' training camp or have resigned for more direct war work. The office of the attorney general has aided in many investigations in connection with the selective draft and in espionage cases, and in addition to the direction of the various campaigns mentioned, has rendered many opinions to the military authorities and to the adjutant general of Porto Rico; has assisted in the organization of the Home Guard; has cooperated with the officials at Camp Las Casas in the work of coordination of the civil and military courts; and has loaned its facilities, including the library and the services of lawyers and stenographers to them whenever these could be of service. There has not been a single instance of friction between the officers of the department of justice and any member of the military establishment. I wish to express my appreciation of the work of Col. Orval P. Townshend as commanding officer at Camp Las Casas, and at the training camps, for his cooperation in the work of the courts of Porto Rico in the sending of witnesses whenever required for cases pending in the courts and in the friendly adjustment of all cases in which there was a possibility of friction between the military and civil authorities.

## REORGANIZATION OF THE GOVERNMENT OF PORTO RICO UNDER THE NEW ORGANIC ACT.

The new organic act brought with it many problems in connection with the reorganization of the government of Porto Rico. The direct effects upon the department of justice were discussed somewhat in my last annual report. The bureau of prisons was assigned by the Governor to the office of the attorney general; the attorney general became a member of the public service commission, and is no longer a member of the upper house of the legislature as he was under the old organic act. But the work in connection with the legislature was in many ways as important as under the previous system. This office through the regular session of the legislature and during the special session aided in the preparation of many bills and memoranda for committee work in connection with pending legislation. The office offered its services to the various committees as a legislative drafting bureau, and many of the most important laws, such as the public service commission law, the intoxicating liquor law, the revenue measures, the laws relating to the judiciary, and other important bills which did not pass, were drafted in this office. Of course, many of these bills were materially altered before final passage, but the assistance of this office was not limited to the first draft of the bills, and additional amendments were prepared whenever requested, and memoranda were prepared giving explanations of the changes effected in the existing law. The public service commission began its work on October 4, 1917, and this office prepared the rules and regulations and by-laws for the commission, and prepared the forms for dockets and other work for the organization of the commission, and by election of the commission the attorney general acted as chairman during the organization period until October 30, 1917.

The work of reorganization of the government also necessitated a large number of opinions by the attorney general construing the provisions of the new organic act and advising the departments and the public service commission on many questions. Over 400 pages of office memoranda with regard to the interpretation of the new organic act were prepared and used, besides the official opinions which were rendered.

## IMPORTANT LITIGATION.

The new organic act and the legislation arising under it have caused the greatest amount of important litigation in which the people of Porto Rico was a party or had a direct interest, and this last year has been by far the busiest of all recent years in this respect. Practically all of this litigation has been conducted directly by this office for the people of Porto Rico. The more important questions raised in the litigation of the year will only be mentioned here, as the principal cases are dealt with later under appropriate headings and all the cases are set forth in Tables 22 and 23.

The following is a partial list of the important court cases:

First. The cases involving the question of the Territorial status of Porto Rico and the incidental questions of the necessity of grand and petit juries.

Second. The American railroad rate case, involving questions of the jurisdiction of the old executive council, the Interstate Commerce Commission, and the new public service commission over railroad rates in Porto Rico.

Third. The cable rate cases, involving the question of the jurisdiction of the public service commission over cable rates over lines between the United States and Porto Rico.

Fourth. The mandamus cases against the executive secretary of Porto Rico, involving the questions of the so-called "pocket veto" by the governor after an adjournment of the legislature, and the meaning of the word "adjournment," and the right of the legislature to sit in perpetual session by means of long recesses after the expiration of the 90 days referred to in sections 31 and 34 of the new organic act.

Fifth. The American Tobacco Co. cases; involving the validity of the tobacco inspection act, known as the guarantee stamp law, under the provisions of the organic act of Porto Rico and of the Constitution of the United States, and many other incidental questions of jurisdiction of the Federal court.

Sixth. The tuberculosis hospital case, involving questions of judicial interference with discretionary administrative functions and questions of jurisdiction of the Federal court depending on the domicile of United States citizens in Porto Rico.

Seventh. The Fortuna water concession case, involving the effect of the most important contract in regard to water rights in connection with the irrigation service.

Eighth. The 28 appeals from the decision of the irrigation commission in regard to the valuation of water concessions and the inclusion of lands in the irrigation district.

Ninth. The taxation cases, in which 42 suits were brought by the principal sugar centrals and other large corporations to recover taxes paid under protest, and which

involved the finality of the decision of the board of review and equalization on questions of value, the effect of voluntary payments, the basis of taxation of corporations of all kinds, and hosts of other questions.

Tenth. The American railroad tax injunction case, involving the question of the exemption of an operative company or lessee under a franchise, and legislative exemption to the French Railroad Co.

Eleventh. The Santiago Iglesias election mandamus case, involving the jurisdiction of the executive council as a canvassing board to open the ballots on the ground of mistakes in the tally sheets.

Twelfth. The American Surety Co. case, in which a judgment for \$10,000 was obtained and satisfied. This case involved important questions of conflict of laws and suretyship.

#### REJECTION OF CITIZENSHIP.

The new organic act which was approved by Congress on March 2, 1917, provided that all citizens of Porto Rico should become citizens of the United States unless they elected, by following the procedure outlined in the act, to reject American citizenship within a period of six months. There were only 283 citizens of Porto Rico, out of more than a million, who availed themselves of this opportunity to reject American citizenship.

In order to reject American citizenship and retain his status as a citizen of Porto Rico, it was only necessary for a person to appear before the district court of the district in which he resided and to make a declaration to that effect in the form prescribed in section 5 of the new organic act. It is to be remembered that during this period of six months from March 2, 1917, the selective service law was passed. During this time there was some agitation carried on by a few persons in Porto Rico to influence as many persons as possible to reject American citizenship, and it was argued that those who preserved their status as citizens of Porto Rico and rejected American citizenship would not be subject to the draft. This agitation, however, was limited to a very small group of persons. The great majority of the press and the public was strongly in favor of American citizenship, and in spite of this agitation, the total number of rejections of American citizenship amounted only to the small number above mentioned. No obstructions of any kind were placed in the way of any person desiring to reject citizenship. The district judges were requested to give any information that might be necessary to any persons who might wish to reject American citizenship and to construe the provisions of the organic act for them. In some cases after persons who had appeared to make a declaration were informed as to their rights, they voluntarily decided not to make such a declaration. In other cases persons who had made declarations and had preserved their status as citizens of Porto Rico desired to withdraw their declarations. In these cases the declarations of withdrawal were filed with the original declarations for future consideration as to the effect of the withdrawals. Several of the persons who rejected citizenship have since become American citizens by naturalization in the Federal court or have petitioned for naturalization.

The provisions of the new organic act with regard to citizenship are as follows:

"Sec. 5. That all citizens of Porto Rico, as defined by section seven of the act of April twelfth, nineteen hundred, 'temporarily to provide revenues and a civil government for Porto Rico, and for other purposes,' and all natives of Porto Rico who were temporarily absent from that island on April eleventh, eighteen hundred and ninety-nine, and have since returned and are permanently residing in that island, and are not citizens of any foreign country, are hereby declared, and shall be deemed and held to be, citizens of the United States: *Provided*, That any person hereinbefore described may retain his present political status by making a declaration, under oath, of his decision to do so within six months of the taking effect of this act before the district court in the district in which he resides, the declaration to be in form as follows:

"I, \_\_\_\_\_, being duly sworn, hereby declare my intention not to become a citizen of the United States, as provided in the act of Congress conferring United States citizenship upon citizens of Porto Rico and certain natives permanently residing in said island."

"In the case of any such person who may be absent from the island during said six months the term of this proviso may be availed of by transmitting a declaration, under oath, in the form herein provided within six months of the taking effect of this act to the executive secretary of Porto Rico: *And provided further*, That any person who is born in Porto Rico of an alien parent and is permanently residing in that island may, if of full age, within six months of the taking effect of this act, or, if a minor, upon reaching his majority or within one year thereafter, make a sworn declaration of allegiance to the United States before the United States District Court for Porto Rico,



setting forth therein all the facts connected with his or her birth and residence in Porto Rico and accompanying due proof thereof, and from and after the making of such declaration shall be considered to be a citizen of the United States.

"Sec. 10. \* \* \* all officials shall be citizens of the United States, and, before entering upon the duties of their respective offices, shall take an oath to support the Constitution of the United States and the laws of Porto Rico.

"Sec. 35. That at the first election held pursuant to this act the qualified electors shall be those having the qualifications of voters under the present law. Thereafter voters shall be citizens of the United States twenty-one years of age or over and have such additional qualifications as may be prescribed by the Legislature of Porto Rico: *Provided*, That no property qualification shall ever be imposed upon or required of any voter."

#### PROHIBITION LAW.

Section 2 of the new organic act, approved March 2, 1917, contains the following provision:

"SEC. 2. \* \* \* That one year after the approval of this act and thereafter it shall be unlawful to import, manufacture, sell, or give away, or to expose for sale or gift any intoxicating drink or drug: *Provided*, That the legislature may authorize and regulate importation, manufacture, and sale of said liquor and drugs for medicinal, sacramental, industrial, and scientific uses only. The penalty for violations of this provision with reference to intoxicants shall be a fine of not less than \$25 for the first offense, and for second and subsequent offenses a fine of not less than \$50 and imprisonment for not less than one month or more than one year: *And provided further*, That at any general election within five years after the approval of this act this provision may, upon petition of not less than ten per centum of the qualified electors of Porto Rico, be submitted to a vote of the qualified electors of Porto Rico, and if a majority of all the qualified electors of Porto Rico voting upon such a question shall vote to repeal this provision, it shall thereafter not be in force and effect; otherwise it shall be in full force and effect."

The necessary number of qualified electors having petitioned for the submission of the question of prohibition to a vote, the matter was submitted and prohibition was carried by a strong majority. On December 5, 1917, the Legislature of Porto Rico passed an act providing for the carrying out of the provisions of the organic act, and providing the same penalties as those prescribed in the organic act (No. 69, approved Dec. 7, 1917, Laws of 1917, vol. 2, p. 412). There is, however, one noteworthy difference between the provisions of the organic act and the provisions of the act of the Legislature of Porto Rico. The organic act makes it unlawful "to import, manufacture, sell, or give away, or to expose for sale or gift any intoxicating drink or drug." The term "intoxicating drink or drug" is not defined in the organic act. By section 1 of the above-cited act of the legislature the term intoxicating drink is defined as follows:

"SECTION 1. The term 'intoxicating drink' as used in this act shall be construed to mean all malt, vinous, or spirituous liquor containing more than two and one-half per cent of alcohol by volume, or any other similar intoxicating liquor which is not sufficiently denatured, medicated, or adulterated, and all preparations of such malt, vinous, or spirituous liquor containing more than two and one-half per cent of alcohol by volume, whether patented or not, suitable for use as a beverage, and all other beverages containing over two and one-half per cent of alcohol by volume."

The constitutionality of this section has not been tested in the courts.

The legislature further authorized the importation, manufacture or sale of intoxicating liquors for medicinal, sacramental, industrial and scientific uses, and enlarged the restriction in the organic act which prohibits the importation or manufacture so as to prohibit the importation or bringing into Porto Rico, or the production or manufacture in Porto Rico, of such liquors except for medicinal, sacramental, industrial and scientific uses.

As a consequence of these laws prohibition went into effect on March 2, 1918, and all licenses for the sale of intoxicating liquors were canceled except in accordance with the provisions of the new act of the legislature. Up to the close of the fiscal year very few violations of the intoxicating liquor law were reported or denounced by the police. There were, altogether, from March 2, 1918 until July 1, 1918, only 22 cases presented to the courts. These cases resulted in 17 convictions, 3 acquittals, and 2 cases remained pending on July 1, 1918. As was to have been expected, many persons of means purchased large stocks of liquor for their private consumption before the prohibition law went into effect. Reports have been received from all the municipal courts and district attorneys which indicate that prohibition has, in many towns of the island, had a marked effect in the reduction of the number of criminal cases. However, it is impossible to give an accurate report as to the effect of prohibition in its relation to crime during the few months that prohibition was in effect during the

last fiscal year. Since July 1 there have been more complaints of the violation of these laws, and an active campaign is being pushed to suppress all violations. This campaign is being made in connection with the campaign against prostitution, and is not confined to the neighborhood of the military cantonment, but is being waged throughout the island, and the result of this campaign will be included in the next annual report of the attorney general.

#### JUVENILE COURTS.

This is the fourth annual report submitted to the governor in regard to juvenile courts since the establishment of the system by the act of the legislative assembly, approved March 11, 1915, and which went into effect on July 1, 1915. The law has now been in force for three years and the results are even more satisfactory than in previous years.

The juvenile court law provides that the attorney general shall furnish a detailed report of the operations of the juvenile courts to the legislative assembly each year, but due to the changes that the new organic act made as to the date of the last legislature, which convened in the month of August, 1917, it was impossible to comply with this requirement. The report could only have covered a period of six months and it was not thought advisable to prepare a report for such a short period. For the present report, however, a complete summary of the work performed in the juvenile courts from January 1, 1917, to June 30, 1918, has been compiled. This covers a period of 18 months. On January 1, 1917, there were 20 cases pending decisions, and including these, 452 children came before the juvenile courts of Porto Rico during this time, and of these only 6 cases remained pending on July 1, 1918. Four hundred and forty-six cases of delinquent and abandoned children were heard and disposed of during these 18 months. Only 6 cases were dismissed due to the fact that the delinquent children were of more than 16 years of age, and these were referred to the municipal or district courts for proper action. The ages of most of the children before the courts varied from 10 to 15 years.

Of the total number of cases nearly two-thirds of the children were legitimate, 270 in number, and 133 were illegitimate. In the remaining 49 cases the status was not ascertained in 24, and in 25 cases the children were recognized. It is a fact to be noted that 252 children, more than half of the total number, never attended school, and of those who did, very few had passed the fourth grade. In 151 cases the children lived with their mothers alone, in 93 with their fathers and in only 16 cases were they found to be living with both parents. There were 77 homeless children, 53 living with friends and 37 with relatives. In 12 of the other 25 cases, the children lived with their brothers or sisters, and in 13 their homes were unknown.

Of the total number of cases, 310 were brought before the court on petitions made by the insular police, 80 petitions were made by the probation officers, and in only 14 cases the petitions were made by the parents and relatives of the children, and in 32 by private persons. In the other 14 cases the petitions were made by the interested parties. Two hundred and thirty-two children were charged with petty larceny. In most of the cases the thefts consisted of small amounts of money or of inexpensive articles which were only stolen with the object of selling them. There were 61 cases of assault and battery, and the other charges were mostly for breaches of the peace, robbery, gambling and infractions of the municipal ordinances, and the offences of the others are shown on Table No. 45. Two hundred and eighty children were declared delinquent and 56 were found to be completely abandoned, and in 110 cases brought before the court the children were found to be not guilty, or the case was dismissed for want of evidence. In 134 cases the courts sent the children to the reform school, and 33 abandoned children were ordered placed in the charity school. In the remaining cases the children were given to the father, mother or some relative or friend with the proper instructions for their care.

As has been stated in the report of the attorney general for previous years, the most serious drawback to the effectiveness of the juvenile court law has been, and unfortunately continues to be, the lack of adequate facilities to take the proper care of those children who can not be given back to their parents on account of their delinquency. The reform school at Mayaguez continues to be insufficient and inadequate for the increasing number of cases decided by the juvenile courts. While during the year 1916, 57 children were placed in the reform school, during the last 18 months 134 children were ordered to be placed therein. As has been already pointed out, the minimum needs are a temporary detention home for each juvenile court, an institution or home with sufficient accommodations to care for abandoned children and a separate institution or home to care for delinquent children. The means for the creation of these institutions should be provided by the legislature.

For more detailed information in regard to the juvenile courts see Tables 39 to 47.

In connection with the proceedings against juvenile delinquents under the juvenile court law, an extensive campaign was initiated in several of the courts against the parents of neglected and abandoned children, when they were responsible for their neglect. A conviction against a father of an illegitimate child for neglect and abandonment of the child under section 263 of the Penal Code of Porto Rico was reversed by the Supreme Court of Porto Rico on the ground that the statute providing for the punishment of fathers and mothers responsible for neglect of their children could not be applied in cases of illegitimate children. Due to the fact that a large proportion of the cases of neglected and abandoned children, and of juvenile delinquency occur in this very class of cases of illegitimate children, this decision may make it difficult to place the responsibility where it belongs. However, other convictions have been obtained under the juvenile court act punishing fathers of illegitimate children, and if they are upheld such persons will not be able to escape responsibility.

#### THE REFORM SCHOOL.

Due to the large number of boys ordered to the Reform School of Porto Rico by the juvenile courts, this institution has continued in a very crowded and unsatisfactory condition. The improvements mentioned in my last annual report, including a new machine and manual training shop, a new honor cottage, a new hospital, and separate quarters for the superintendent and the attendants have been practically completed and have been put into operation during the last few weeks. There has been an average of 156 boys in the school during the fiscal year, which average was increased to about 200 during the last six months of the year, and the average for next year will probably be over 200. It has never previously exceeded 100. The institution is barely capable of proper facilities for 200 boys, but the conditions there are so much better than the district jails for these boys that it is always kept crowded. Another institution with capacity for 200 additional inmates should be provided.

#### SUPREME COURT.

The work of the supreme court shows a considerable increase in the civil cases from 157 appeals for the year 1916-17 to 194 civil cases for the year 1917-18, and a corresponding increase in the administrative appeals and cases of original jurisdiction. There is, however, a falling off in the number of appeals in criminal cases from 123 to 109. There were 402 cases decided by the supreme court during this last year as compared with 398 and 431 during the two preceding years. The number of cases pending on June 30, 1918, was 123, compared with 121 for June 30, 1917.

#### DISTRICT COURTS.

The work of the district courts can be appreciated only by a careful study of the tables numbered 2 to 8. This study of the tables and a comparison with the preceding year discloses an increase in the number of criminal cases disposed of during the year from 1,800 for the preceding year to 2,084 for the year ending June 30, 1918, and an increase in the number of cases pending from 374 to 532. It will be noted that of these 532 cases pending at the end of the year, 379 are in San Juan.

There were 143 jury trials with a total of 90 convictions, 49 acquittals, and 4 cases dismissed or transferred to the other courts, giving a percentage of convictions compared with acquittals of 64.75, compared with 65.58, 65.15, and 65.66 for the preceding years. There were 299 felony cases tried in the district courts without a jury, the jury being waived. There were 157 convictions, 136 dismissals, and 6 acquittals among these cases, or a percentage of convictions compared with acquittals and dismissals of 52.51 per cent, and a percentage of convictions over acquittals alone of 96.32 per cent. In earlier years these statistics were considerably confused, due to the fact that it was not clear whether acquittals and dismissals were counted in amongst the percentages, or only acquittals. For this reason the figures varied from 50 odd per cent of convictions to 90 odd per cent. The statistics as fully presented during the last two years show that the percentage of convictions in felony cases, with or without a jury, are practically the same. There were 875 misdemeanor cases tried originally in the district courts. These were, of course, without a jury under our laws. Of these, 661 resulted in convictions, 115 in acquittals, and 99 in dismissals, or a percentage of 75.54 convictions and 24.46 acquittals and dismissals.

#### MUNICIPAL COURTS.

The work of the municipal courts during the last year has been excellent. It even shows an improvement over the preceding year. With more than 32,000 criminal cases presented and disposed of during the year, there were only 73 cases pending at

the end of the year, compared with 355 for the preceding year which was a banner year. The percentage of convictions compared with acquittals and dismissals was 71.62, compared with 71.27 for the preceding year.

#### REGISTRIES OF PROPERTY.

The registries of property also made an excellent record during the last year, exceeding their previous best record which was in 1916-17. The total number of documents examined was 11,308, compared with 10,952 for the preceding year.

The number of documents pending at the end of the year was 30, compared with 119 for the preceding year, which was the previous best year in this respect. The total fees collected were \$88,091.98, compared with \$83,584.80 for the preceding year.

#### PENAL INSTITUTIONS.

The policies outlined in my last annual report, pages 514-515, have been carefully carried out during the last fiscal year. It was hoped that a new penitentiary and new jails at Aguadilla and Guayama could be constructed soon, but owing to the financial difficulties the government was unable to provide any of those institutions. The additions to the Reform School of Porto Rico are discussed at another place in this report, as are the changes made in the Ponce and Arecibo jails. As is stated above under the title of war activities, these jails have been converted into hospitals for women prostitutes convicted under the laws of Porto Rico.

In the penitentiary new rules and regulations were adopted for the carpentry shop. Under the old system much private work was done without other charge than the cost of materials. This private work will be abolished and standardized work begun, especially in the making of office furniture for the government. Any surplus articles will be sold at reasonable prices under rules and regulations prescribed by the attorney general and the auditor of Porto Rico, and the proceeds will be turned into the trust fund for the benefit of the prisoners.

A new system of checking the rations of the prisoners in all of the penal institutions with the amount of foodstuffs delivered has also been put into effect, and it is hoped that this system will make possible the absolute assurance that every pound of foodstuffs is accurately accounted for. The wheat bread ration was materially cut during the last year, and corn meal and other substitutes were furnished in accordance with the policy of the National Food Administration in the conservation of wheat. The prisoners have all shown a marked sympathy with this change and have in many other ways expressed their patriotism and loyalty. As an example, all of the prisoners in one jail offered their services as soldiers if they could be released and were greatly disappointed that they could not be accepted for the army. Many voluntary contributions have also been made by the prisoners for the Red Cross.

One other notable feature in connection with the prisons is shown by the statistics attached to this report in Tables 37 and 38. One hundred and twenty-eight thousand six hundred and ninety-five days' work were performed on the insular roads during the last fiscal year as compared with 112,159 for the year 1916-17, and 69,161 for the year 1915-16. In addition to this work, 38,436 days' work were performed for the various departments of the government, the largest amounts being for the department of sanitation, the police and the courts, and the department of the interior. See table 38

#### IRRIGATION APPEALS.

As provided by section 5 of the public irrigation law approved August 8, 1913, the temporary irrigation district continued in existence until July 1, 1917, when the permanent district was finally formed. In this district the irrigation commission included certain lands which in the opinion of the commissioner of the interior should not have been included and excluded others which this official considered should have been made part of the said permanent district. The commissioner of the interior also thought that in some cases the irrigation commission had given a wrong valuation to the relinquished water rights and concessions in connection with the determination of the lands to be included in the district.

In 26 of these cases, which were submitted to this office, appeals were taken to the proper court in order to obtain a revision of the findings of the commission. Two appeals were instituted by private parties, and this department also handled these cases for the irrigation service. Four of these cases have been finally settled; three of them because of a compromise entered into by the commissioner of the interior and the parties interested, and in the fourth case the decision of the court was favorable to our contention. The other cases are pending decision. This department has filed a brief covering the questions involved in all of them.

## RUSSELL &amp; Co. v. HENNA ET AL.

Construction of contract valuing water concessions.

This case was extensively reported in my last annual report. It will be remembered that on April 5, 1916, Fortuna estates brought an action in the United States district court for Porto Rico against Emilia V. Henna et al. to restrain them from using water which Fortuna estates claimed to own by virtue of certain irrigation concessions and a contract entered into by the people of Porto Rico. Section 2 of this contract provided that Fortuna estates would receive a certain specified amount of water, the fair equivalent in value of the Spanish water concessions, and in addition it was provided by section 3 that—

"Third. Fortuna estates is hereby granted the right while this agreement remains in force to take, in addition to all amounts of water above specified, from the Jacaguas River by pump at the said Aruz pumping station, water which may be available there for irrigation of any of its said lands, to the extent that such taking shall not deprive any owners or users of subsisting water rights or concessions upon the Jacaguas River of the water to which such owners or users may be entitled, either by virtue of such water rights or concessions or by virtue of any agreement or agreements in regard thereto entered into or to be entered into by them with the people of Porto Rico: *Provided, however,* that should the people of Porto Rico at any time undertake the development and utilization of the surplus waters of this part of the Jacaguas River, this right shall be understood to be limited to a maximum usage of 3.86 second-feet \* \* \*"

The people of Porto Rico was not made a party to this action. A preliminary injunction was granted and an appeal was taken to the circuit court of appeals by one of the defendants. This court reversed the decision of the lower court and decided that the people of Porto Rico was an indispensable party to the action and should have been given an opportunity to come into the case and defend if it wished to waive its immunity from suit. The injunction was therefore dissolved. The people of Porto Rico then intervened in the action and filed an answer which was amended on June 13, 1917. Some time later and over the objection of the people of Porto Rico a bill in the nature of a supplemental bill was filed substituting Russell & Co., a partnership which is alleged to be a purchaser of the lands, as plaintiff.

The contention of Fortuna estates first and of Russell & Co. since the supplemental bill was filed, has been that clause 3 of the agreement above quoted between the commissioner of the interior and Fortuna estates entitled it and now its successor, Russell & Co., to all the surplus water in the Jacaguas River unless the people of Porto Rico undertakes developments in the river, in which case their right should be limited to 3.86 second-feet. The contention of the people of Porto Rico on the other hand has been that the contract does not prevent the people of Porto Rico from selling surplus water above the Aruz pump. The people of Porto Rico sold surplus water to the defendants in this case and it was these waters which the plaintiff seeks to enjoin them from using. This case was tried on its merits during the 22d and 23d of June, 1918, and on July 16 the court granted a permanent injunction against defendants. Steps are being taken now to appeal the case to the circuit court of appeals.

It is my opinion that the interpretation given by the court to the agreement between the commissioner of the interior and Fortuna estates is erroneous, inasmuch as there is nothing in this contract justifying the conclusion that the plaintiff is the owner of all the waters of the Jacaguas River between the Guayabal dam and Aruz pump. Moreover, the circuit court of appeals in reversing the order granting the preliminary injunction construed the contract, which construction is in accord with the interpretation given by this defendant to the said agreement. Judge Dodge, who delivered the opinion of the court, in referring to paragraph 3 of the contract, stated that this section was reasonably capable of a construction which, instead of giving the plaintiff exclusive water rights in excess of its regular deliveries so extensive as to enable it to appropriate all water in the river other than torrential, for a time extending so far into the future, enables it only to appropriate such proportion of the excess water as present or future agreements with others, then enjoying concessionary rights, might leave available at the plaintiff's Aruz intake, but not in any event to appropriate more than 3.86 second-feet.

COMPANIA DE LOS FERROCARRILES DE PUERTO RICO V. THE TREASURER OF PORTO RICO.

La Compañia de los Ferrocarriles de Puerto Rico brought an action against the treasurer of Porto Rico in the District Court of the United States for Porto Rico, to enjoin him from taking further steps or proceedings to collect taxes of any kind or character from the American Railroad Co. on the ground that this company has no

property in this island, and that all the property which it uses in the operation of the railroad, commonly known as the American Railroad, is really the property of the *Compañía de los Ferrocarriles*, which is exempt from the payment of taxes under an act of the Legislative Assembly of Porto Rico, entitled "An act to exempt from taxation for a period of years certain railroads for the construction and operation of which franchises have been granted by the Executive Council of Porto Rico," approved February 4, 1902. The defendant appeared specially and filed a motion to dismiss the bill on the ground that the action, although brought against the Treasurer in his official capacity, was in reality an action against the people of Porto Rico which had not consented to be sued. This motion was overruled by the court on February 15, 1918, and a preliminary injunction issued. Thereupon the defendant filed an answer denying all of the material allegations of the bill. The final hearing of the case was had on the 22d of June and briefs have been submitted by the parties.

The government's contention is, that the exemption granted to the *Compañía de los Ferrocarriles* is personal and that the American Railroad Co. can not claim in its favor any exemption which may have been granted to the complainant. It is further contended that the treasurer of Porto Rico has the right and duty to tax the capital invested by the American Railroad Co. in Porto Rico and that he has never sought to tax property exempt from taxation. The question of taxing the capital invested by the American Railroad Co. in this island has been the subject of discussion for many years, but this is the first time that the matter has been submitted for adjudication by the courts. The suit now pending is therefore one of the most important of the ones handled by this department during the last fiscal year.

#### MANDAMUS CASES AGAINST PUBLIC OFFICIALS.

During the last fiscal year several mandamus suits were brought against public officials, some of which deserve special consideration because of the importance of the questions involved. These cases will be briefly discussed.

#### MUNICIPALITY OF QUEBRADILLAS V. THE EXECUTIVE SECRETARY OF PORTO RICO.

The municipality of Quebradillas filed a petition for a writ of mandamus in the Supreme Court of Porto Rico against the executive secretary to compel him to publish an act entitled "An act providing for the maintenance of the artesian well at Quebradillas and for other purposes," approved by the Ninth Legislature of Porto Rico at the regular session which began on August 13, 1917. On March 30, 1918, the supreme court issued an order to the executive secretary to show cause why the writ of mandamus should not be issued. A proper answer was filed, a hearing was had and the attorney general filed a brief, and the case is now pending decision. The act in question was sent to the governor on November 26, 1917, after the legislature had been in session for more than 90 days and on the same day that the two houses of the legislature had passed a resolution purporting to adjourn the legislature until the 4th of February. The governor had retained the bill for more than 10 days, exclusive of Sundays, and had then filed it with the Secretary without signature and without having vetoed it or having returned it to the house of representatives in which it originated with his objections thereto. The complainant contends that this act became a law because there is no limitation upon the length of the sessions of the legislature, and the adjournment for more than two months was not such an adjournment as was meant by the clause of section 34 of the new organic act which reads:

"If any bill shall not be returned by the governor within ten days (Sundays excepted) after it shall have been presented to him, it shall be a law in like manner as if he had signed it, unless the legislature by adjournment prevents its return, in which case it shall be a law if signed by the governor within thirty days after receipt by him; otherwise it shall not be a law."

The government's contention is that the adjournment for more than 10 days exclusive of Sundays, made it impossible for the governor to return the act with his objections, and that when the Legislature on November 26, after having been in session for more than 90 days, took an adjournment for more than two months, this was in fact and in law a final adjournment. The case is important, inasmuch as it involves the interpretation of important provisions of the new organic act.

#### JUAN FRANCISCO PACHECO ET AL. V. DISTRICT JUDGE OF HUMACAO.

A petition was filed by Juan Francisco Pacheco and others in the Supreme Court of Porto Rico requesting the issuance of a writ of mandamus to compel the district judge of Humacao to decide a certain civil case pending in that court, in which the complainants are parties. An order to show cause was issued on May 1; and a proper

answer filed on behalf of the district judge stating the reasons why the petition should be denied. Oral arguments were had and briefs filed by both parties. The case is now pending decision.

The question involved in this case is the same as that to be decided in *Municipality of Quebradillas v. The Executive Secretary, supra*. Complainants base their petition on a bill passed by the two houses of the last legislature which directs the district courts to render judgment in all civil cases within a term of ninety days. This bill had been passed and sent to the governor under the same circumstances as that one in question in the petition of the municipality of Quebradillas. If a final decision should be given in any of these cases it will affect several acts passed by the ninth legislature under the same conditions as the two involved in these suits.

#### SANTIAGO IGLESIAS V. THE EXECUTIVE COUNCIL.

Santiago Iglesias, the candidate of the Socialist Party for senator at large, filed a petition for a writ of mandamus in the Supreme Court of Porto Rico to compel the executive council as a canvassing board, to count the ballots cast at the last election, on the ground that there had been mistakes in the tally sheets certified to the executive council, and that the executive council had no proper basis for the calculation of the number of ballots cast for each candidate.

On August 9, 1917, a hearing was had before the supreme court to determine whether or not the writ should be issued and on this hearing this department represented the executive council of Porto Rico. Our contention was that the executive council of Porto Rico had no power under the election law to examine the ballots cast in favor of the candidates but that it only had the right to examine the tally sheets, and in case that the tally sheets as submitted clearly showed that mistakes had been committed by the local clerks and inspectors in the different balloting districts, and that such tally sheets did not correspond with the other lists submitted, that then the executive council as a canvassing board in the exercise of its ministerial power had the discretion to determine from the figures submitted what persons had been elected. We also contended that the courts did not have jurisdiction to decide whether in fact the petitioner had received a sufficient number of votes to be elected as senator at large, and that this was a question to be decided solely by the legislature.

The petition in this case was denied.

#### HERMINIO DIAZ NAVARRO V. THE ATTORNEY GENERAL OF PORTO RICO.

Herminio Diaz Navarro, who has been for a number of years keeper of the general archives of the district of San Juan, was declared insane by the district court of San Juan, section first, and the attorney general proceeded to appoint Juan de Guzmán Benítez, the oldest notary on the district, as keeper of the general archives, under section 36 of the notarial law. Some time later the court revoked its decision, holding that Diaz Navarro was in good mental condition, and as soon as this decision was rendered Herminio Diaz requested the attorney general to remove Mr. Juan de Guzmán Benítez and to reappoint him a keeper of the notarial archives, and this request was denied. Diaz Navarro immediately filed a petition in the Supreme Court of Porto Rico for a writ of mandamus against the attorney general to compel him to reappoint him. As Juan de Guzmán Benítez was not made a party to the proceeding by the complainant, this department objected to the issuance of the writ on the ground that Mr. Guzmán Benítez was an indispensable party, inasmuch as the question whether he was holding his position within the law was one which could not be determined without giving him an opportunity to be heard. It was also contended that title to public office could not be questioned in a mandamus proceeding. The Supreme Court of Porto Rico upheld our contentions and the petition was dismissed.

#### THE SCHOOL BOARD OF CIDRA V. THE COMMISSIONER OF EDUCATION.

A petition was filed in the district court of San Juan, section 2, against the commissioner of education for a writ of mandamus to compel him to cancel the appointment of an English teacher made directly by him and without the intervention of the school board of Cidra, and to appoint in his place one of the teachers recommended by the board. The district court issued an order to the commissioner of education on September 17, 1917, to show cause why the writ should not be issued. Proper answer was filed by this department on behalf of the defendant, alleging, first, that the commissioner of education had made the appointment in accordance with the law; and, second, that inasmuch as the teacher appointed by the commissioner had not been a party to the case, it was impossible to determine his right to continue in the position without giving him an opportunity to be heard.

The district court decided this case, dismissing the petition. The school board appealed to the supreme court, but the appeal was dismissed by this tribunal for failure on the part of the appellant to file its brief within the proper time.

#### CIVIL SERVICE CASES.

These cases were fully reported in my last two annual reports, but are again mentioned because of their importance and because the Supreme Court of Porto Rico has finally disposed of the last of these cases, holding that the indictment for conspiracy to violate section 14 of the civil service law framed in the words of the statute did not state an offence. This statute, it will be remembered, provides that—

“\* \* \* Any person soliciting political contributions from public officers and employees shall be subject to a penalty of not exceeding \$500 or to imprisonment not exceeding six months or both.”

From the opinion of Justice Wolf, who wrote the majority opinion, it appears that the decision is based upon a fear that any other construction of the statute would make the law unconstitutional. The court therefore interpreted the statute in a way to relieve it of this possible taint. A certiorari was taken to the Supreme Court of the United States, but the question being one of construction the petition was denied.

The old system of forced political contributions from school-teachers has been again put in effect in many of the towns of Porto Rico. It is very difficult to obtain evidence of the duress which the supreme court holds is necessary to constitute a crime.

#### TERRITORIAL STATUS OF PORTO RICO.

##### THE MURATTI AND TAPIA CASES.

This question is dealt with in the introductory part of this report, and was extensively discussed in my last annual report. The Supreme Court of the United States in *The People of Porto Rico v. Carlos Tapia*, and *The People of Porto Rico v. José Muratti*, 245 U. S., 639, reversed the decision of the United States District Court for Porto Rico and the Supreme Court of Porto Rico which held that Porto Rico was an incorporated Territory of the United States, and that no person could be held for an infamous offense without an indictment by a grand jury. This reversal by the Supreme Court, within a few months of the decisions of the lower courts, left the criminal procedure of Porto Rico intact, subject to amendment by the local legislature. But aside from the immediate effect it is important to note that the holding that Porto Rico is not an incorporated Territory of the United States denies no right to Porto Rico which any incorporated Territory has. It does not deprive the people of Porto Rico of the grand jury. It simply decides that the question of whether a grand jury shall be established in Porto Rico depends upon the Legislature of Porto Rico.

The Supreme Court of the United States in deciding this question followed its previous decisions and dicta to the effect that the question of the political status of a territory was to be determined by Congress, and depends upon the expression of congressional intent.

Porto Rico has been recognized as an organized Territory of the United States in many decisions of the Supreme Court of the United States. Since the enactment of the Jones bill which conferred citizenship of the United States upon Porto Rican citizens, the question was presented to the courts as to the effect of such a grant of citizenship upon the political status of the Territory. The question arose in the *Tapia* and *Muratti* cases as to whether grant of citizenship made applicable the fifth amendment of the Constitution of the United States, which would automatically nullify the existing laws of Porto Rico with regard to proceedings by information of a fiscal, and require all criminal cases involving infamous crimes to be instituted by an indictment or presentment by a grand jury.

The decision of the Supreme Court does not in any way limit or restrict the effect of the grant of American citizenship, and the effect of the decision is that the question of incorporation of a Territory does not depend upon citizenship alone.

A citizen of the United States born in Porto Rico is entitled to all the rights and privileges of any other American citizen in Porto Rico, in any other part of the United States, or in any part of the world. In a State of the Union a grand jury is not required in the State courts by the United States Constitution. In California and many other States where the grand jury has been abolished, or modified, neither he nor any other citizen of the United States may be entitled to a presentment or indictment by a grand jury any more than in Porto Rico under the Jones Act, but he is in no sense a different kind of an American citizen in California or in Porto Rico than



he or any other American citizen is in New York or Massachusetts, where a grand jury is required.

Citizenship of the United States is the same all over the world. Porto Rico has all of the fundamental guarantees of the United States Constitution. The Jones Act did not destroy the existing code of criminal procedure in Porto Rico. It left to the Legislature of Porto Rico the discretion as to the necessity and wisdom of organizing a grand jury.

There are only three differences in the effect of the holding that Porto Rico is not an incorporated Territory of the United States under the Jones bill:

1. If Porto Rico had been held to be an incorporated Territory of the United States it would have been necessary under the fifth amendment to the Constitution of the United States to institute all proceedings for infamous crimes by an indictment or presentment of a grand jury.

2. It would have been necessary to have tried all crimes, misdemeanors, and felonies by a petit jury, except in cases of petty offenses, and it would have required a petit jury in all civil cases involving more than \$20.

3. It would have required the enforcement of the internal revenue laws of the United States, including the war revenue taxes in Porto Rico, uniformly with all other States of the United States.

The decision of the Supreme Court of the United States, therefore, leaves Porto Rico in a favored condition in so far as the exemption from Federal taxation is concerned, since Porto Rico has not been made subject to all of the Federal internal revenue laws or to war taxes, and, by the Jones bill, all internal revenue laws unless specifically made applicable to Porto Rico do not apply to Porto Rico, and all the revenues collected from such internal revenue laws under the present organic act are given to Porto Rico, which is not the case with any other Territory of the United States. Neither the decision nor the laws of Congress deny to Porto Rico the grand or petit jury in any case. The question of the advisability of the adoption of the grand jury is left solely to Porto Rico.

Congress may at any time make Porto Rico an incorporated Territory by a simple declaration to that effect without the necessity of in any manner changing the present organic act. The decision presents no obstacle whatsoever to incorporation when Congress so declares its intent. The debates in Congress at the time of the passage of the Jones bill, and the reports of the committees in charge of the bill do not in any manner indicate the intention of Congress upon this question of incorporation.

Not only is Congress free to declare Porto Rico at any time an incorporated Territory, when it is believed by Congress that the requirement of uniformity in taxation and the requirement in regard to petit and grand juries would not work a hardship, but Congress might admit Porto Rico as a State without such previous declaration, and without its ever having been an incorporated Territory, as was done in the case of Texas. In the various States of the United States the grand jury and petit jury are not required in the States courts by the United States Constitution, and Porto Rico in this respect is more nearly in the position of a State than it would have been had it been held to be an incorporated Territory. Grand and petit juries are required by the United States Constitution only in the courts of the United States. They are required to-day in the District Court of the United States for Porto Rico. In an incorporated Territory the courts of the Territory are held to be courts of the United States, and the usual procedure in regard to incorporated Territories has been to provide for the appointment of the officials of said courts by the President of the United States. Furthermore, Porto Rico is nearer to the status of a State in regard to the regulation of its common carriers and public service companies. The internal traffic on public carriers in any State is subject to State regulation, but in an incorporated Territory it is subject to the exclusive jurisdiction of the United States Interstate Commerce Commission. Porto Rico has by the organic act been given a public service commission, and been given the right to regulate its own internal commerce in the same manner as a State.

Therefore citizenship and the status of the people is in no way affected by the decision of the Supreme Court, and citizens of the United States from Porto Rico have all the rights and privileges which any citizen of the States possesses, and Porto Rico is not deprived of any of the benefits of the Constitution or of the Jones Act, as it would have been had the decision been that Porto Rico was an incorporated Territory.

## TAXATION CASES.

## ACTION TO RECOVER TAXES PAID UNDER PROTEST.

Forty-two cases instituted to recover taxes paid under protest were in litigation during the fiscal year 1917-18. Thirty-three of these cases were originally filed in the district court of San Juan, section first, four in the district court of Ponce, four in the district court of Humacao, and one in the district court of Guayama. Several cases of this nature filed in the municipal courts were dismissed on motion of the government. Taxes claimed in these cases amount approximately to \$135,000.

In the case of the *Ensenada Estates v. The Treasurer of Porto Rico*, referred to on page 520 of the report of the attorney general for 1917, decided by the Supreme Court on July 28, 1916, reversing the judgment of the lower court, sustaining the defendant's demurrer which had been sent back to await trial on the merits, a motion to dismiss the action because of failure to prosecute was filed by defendant on October 9, 1917. The district court granted the motion to dismiss and on November 6, 1917, judgment in favor of the government was rendered and filed after a writ of prohibition petitioned for by the plaintiffs had been denied by the Supreme Court of Porto Rico. Appeal was taken to the Supreme Court of Porto Rico by plaintiffs, and the case heard on May 24, 1918. The case is at present pending decision.

The two cases of *Sauri and Subira v. The Treasurer of Porto Rico*, dealt with in the report of 1917, page 520, were decided by the district court of Ponce, after trials on the merits, on July 19, 1917, in favor of the government. On appeal the Supreme Court of Porto Rico in both instances affirmed the action of the lower court, after the end of the fiscal year. The taxes claimed in these two cases amount to \$1,625.17.

In *South Porto Rico Sugar Co. v. Treasurer of Porto Rico*, a case instituted to recover taxes paid under protest, a demurrer filed by the defendant on the ground that the payments made were voluntary inasmuch as there had been no duress by the government was sustained and judgment entered for the government. The case was appealed to the Supreme Court of Porto Rico and the defendant asked for a reconsideration of the decision rendered in the case of *Ensenada Estates (Inc.) v. Treasurer of Porto Rico*, 24 P. R. R., 462, in addition to the contention that the payments were voluntary. The case was decided on June 29, 1918. The judgment was reversed and the case remanded for further proceedings not inconsistent with the opinion.

**WEST INDIA AND PANAMA TELEGRAPH COMPANY (LTD.) AND COMPAGNIE FRANCAISE DES CABLES TÉLÉGRAPHIQUES V. THE PUBLIC SERVICE COMMISSION, AND THE ATTORNEY GENERAL OF PORTO RICO.**

On March 26, 1918, the public service commission, after due hearing, ordered the West India & Panama Telegraph Co. and the Compagnie Francaise des Cables Télégraphiques, the two cable companies which control the entire cable service between Porto Rico and outside points, to reduce their rates by 40 per cent after April 9, 1918, on all commercial messages and press dispatches between the United States and Porto Rico, and specified that the reduction should remain in force for a period of six months unless previously changed before the expiration of that time by the public service commission. Because of the failure of the companies to furnish complete and adequate information to the public service commission on the hearing, the commission further ordered the companies to furnish, as soon as possible, within a period of six months, a complete financial statement of their business for the last five years, and year by year, in order that the evidence might serve as a basis for the fixing of cable rates in the future.

On April 9, 1918, the date when the order was to be effective, the cable companies brought an action against the public service commission and the attorney general in the Federal court, to restrain the enforcement of the order on the theory that it denied to the companies the right to make an adequate return on their investment, and amounted, therefore, to a confiscation of their property; and further on the ground that the public service commission was without jurisdiction under the organic act of Porto Rico to make such an order. The public service commission and the attorney general objected to the granting of the injunction because the suit, if sustained, would be an unlawful interference by the court with the powers of governmental agencies, and would therefore amount to a suit against the government itself, which can not be sued without its consent. This opposition was made by special appearance. The court, however, overruled the special appearance because the plaintiffs had alleged that they were deprived of their property without due process of law, and the commission, if such were the case, was acting in violation of the Constitution of the United States, and was not entitled to the immunity of a sovereign from suit.

After this opinion was given by the court the defendants moved for an order to hold the hearing for the preliminary injunction before three judges, one of whom should be a judge of the United States Supreme Court or a circuit judge. This motion was made on the theory that a constitutional question under the Constitution of the United States was raised, and consequently under the terms of the Judicial Code of the United States no preliminary injunction could be granted in such a case without a hearing before three judges. The court, however, held that the section of the Judicial Code upon which the motion was based was not applicable to Porto Rico because of the peculiar constitution of the Federal court in Porto Rico and the isolated position of the island, making it inexpedient and impracticable to exchange judges.

Thereafter, on May 20, a motion was made by the defendants to quash the summons and dismiss the petition on the ground that there was a misjoinder of parties plaintiff because the actions joined are not joint with respect to both the plaintiffs, and the convenient administration of justice will be interfered with by a joinder. This motion was overruled.

On June 20 the court granted a preliminary injunction on the theory that the action of the public service commission constituted a deprivation of property without due process of law, and was confiscatory in its nature. The court further ordered that publication be made and all parties financially interested in the question of the rates of the companies, or of either of them, be notified of their right to intervene and present whatever evidence may be proper as to the rates.

The defendant then appearing specially, submitted an answer in which the material allegations of the complaint were denied, and it was specially alleged that because the complainants had failed to furnish complete and adequate information to the public service commission, although given every opportunity and requested to do so, they have a complete and adequate remedy by obtaining such data and submitting it to the commission and petitioning for a reconsideration of the order of the commission, and that any failure of the commission to consider all the questions necessary to be determined before making a final and definite order in regard to the rights of the complainants was due to the negligence, willful acts, and failure of the complainants. The defendants alleged further that they have always been ready and willing to approve reasonable and fair rates for the complainants which will yield them a fair and adequate return upon the investment of the complainants, when the complainants will submit the proper evidence to the commission.

On July 3, 1918, after the beginning of the new fiscal year, the attorney for the complainants requested the court to eliminate from the complaint all questions relating to the reasonableness of the rates. The court, after ascertaining that the defendants had no objections to the amendment offered, ordered the elimination as requested and gave the complainants five days to submit a new and amended bill of complaint, and an amended bill of complaint was filed in accordance with the above order, which contained no allegations to the effect that the order of the commission is illegal because of its confiscatory nature, and which raised only the questions of the power of the public service commission to enter the order complained of.

To this amended bill of complaint the defendants, again appearing specially, moved to quash the summons and dismiss the amended petition on the ground that the facts as stated in the amended petition do not constitute a cause of action. This motion was filed and argued on July 15, on which date the order of the court granting the preliminary injunction was modified by eliminating therefrom all provisions relating to a hearing with regard to the reasonableness of the rates. A long brief was filed by the defendants on July 20, 1918, which has been subsequently printed.

PORTO RICAN AMERICAN TOBACCO CO. v. JOSÉ E. BENEDICTO, TREASURER OF PORTO RICO.

The Porto Rican American Tobacco Co. petitioned for an injunction to restrain the treasurer of Porto Rico from enforcing the provisions of an act of the Legislature of Porto Rico, approved December 3, 1917 (Act No. 50), entitled "An act to amend an act entitled 'An act to protect Porto Rican cigars from fraudulent misrepresentation by providing for adequate expert inspection and the issue of stamps of guarantee covering the origin of tobacco used in the manufacture of such cigars intended for exportation, and for other purposes,' approved March 11, 1915." The petition is based upon the grounds that the act in question is in conflict with the Constitution of the United States, inasmuch as it deprives the complainant of equal protection of the laws; that it amounts to a deprivation of property without due process of law; and that it constitutes an unlawful interference with interstate commerce; and that it is in conflict with the organic act of Porto Rico, inasmuch as the title of the act gives notice of an inspection purpose only, and the act is in fact essentially a tax act.

A special appearance and special motion for a hearing before three judges were made in the same manner and upon the same grounds as those in the case of the cable companies. Both of these motions were denied. A special answer was then filed reserving the questions of jurisdiction and the case was then argued upon the pleadings. Briefs were submitted on May 27 and 29. The defendants submitted a printed brief of 96 pages and a supplemental brief.

The contentions in regard to the constitutionality of the measure are too long to repeat in this report but are fully set forth in the printed briefs.

**TUBERCULOSIS HOSPITAL CASE—H. H. SCOVILLE ET AL. V. ALEJANDRO RUIZ SOLER ET AL.**

One of the most interesting and important cases with which the department of justice has been actively engaged and one in which the public is the most interested is the action which three complainants brought against the commissioner of health to restrain the erection of a tuberculosis hospital or sanitarium in the district of Sabana Llana. The petition in this case was filed on February 19, 1918, and from the date of the filing thereof until the argument after the final hearing on the permanent injunction, which argument was held on Wednesday, August 14, after the close of the fiscal year, one continuous legal fight has taken place.

The petitioners in this case ask for an injunction to restrain the consummation of a contract between the commissioner of health and the defendants Hubbard, by the terms of which the commissioner of health is to acquire certain property in Sabana Llana for the people of Porto Rico, which property is to be used for the confinement of tuberculosis patients. The complainants allege that if such an institution is erected a nuisance will be created by the polluting of the water supply, the endangering of health, comfort, and happiness of the surrounding community, and the causing of irreparable damage to the surrounding property. On the date that the petition was filed a temporary restraining order was granted. Thereafter, on February 25, the defendant Soler filed a special appearance and motion to dismiss the petition on the ground that the action, although brought against the commissioner of health in his official capacity, is in reality an action against the people of Porto Rico, and the court is without jurisdiction because the people of Porto Rico has not consented to the suit. It was also contended in this motion that the restraining of the transfer of the land was a direct interference with the discretionary powers of an executive official acting within the scope of his official capacity, inasmuch as the court was unable to ascertain the ultimate result of such transfer and could not decide, as a matter of law, that a nuisance would follow such transfer. At the same time of the filing of this motion the defendants Hubbard filed two motions, one to dismiss the action on the ground that the facts as stated in the petition did not constitute a cause of action against these defendants, because the court could not restrain the sale of land, and another motion alleging that the court was without jurisdiction because the plaintiffs were not shown to be citizens of a State, Territory, or district of the United States and not domiciled in Porto Rico under the terms of section 41 of the Jones Act.

On March 2, 1918, the motion by the commissioner of health was argued and briefs were directed to be filed. On this date there was filed by the defendants Hubbard 10 affidavits in support of the contention that the tuberculosis hospital in the community would not constitute a nuisance, and 13 affidavits in support of the petition were filed by the complainants.

On March 9, 1918, the motion of the commissioner of health was denied, the court holding that the suit was not one against the people of Porto Rico, and a preliminary injunction was granted. From the preliminary injunction the defendant Ruiz Soler appealed after obtaining a severance.

During the pendency of the appeal a final hearing was held in the court below and briefs were filed and the case submitted.

The case is now pending a final decision on the merits in the Federal district court and a decision on the appeal from the preliminary injunction in the circuit court of appeals upon the jurisdictional question.

**THE PEOPLE OF PORTO RICO V. AMERICAN RAILROAD CO.**

This case was brought on April 25, 1917, in the district court of San Juan to restrain the American Railroad Co. from increasing its schedule of freight rates 20 per cent in accordance with a petition which has been filed with the executive council of Porto Rico, asking permission and authority to do so, but which increase had been put in force while the petition was still pending and before the executive council had taken action thereon. On April 28, 1917, the case was removed to the District Court of the

United States for Porto Rico by the defendant and a motion was made to dismiss the bill on the ground that it did not state any matter of equity entitling the plaintiff to the relief prayed for, nor were the facts sufficient to entitle the plaintiff to relief. This motion was denied on April 30, 1917, and the complainant was given five days to amend its bill so as to come under the emergency section of the public service act of 1908. On May 2, 1917, the amended bill of complaint was filed, and an answer was submitted by the defendant on May 3. On the same date Guanica Central was granted leave to intervene as a party plaintiff. The court in its opinion of April 30, 1917, held that the interstate commerce act repealed the provisions of the local public service act with respect to the regulation of public carriers in Porto Rico, and although the organic act of March 2, 1917, repealed the interstate commerce act so far as the same may be applicable to Porto Rico, nevertheless it did not confer upon the executive council the power to regulate public carriers inasmuch as there was no local legislation expressly providing for the delegation of this power by the Legislature of Porto Rico, and the previous act of the legislature was not revived by the repeal of the repealing act. As a result, the common law governing the fixing of railroad rates was in force at that time and the court was empowered to determine the reasonableness of the rates promulgated by the railroad.

On May 3, 1917, the motion for a preliminary injunction was denied, but the American Railroad Co. was ordered to pay into court weekly the proceeds of the increased rates subject to further decision in the court upon hearing as to the existence of an emergency which would justify the issuing of a final injunction, and as to proof regarding the reasonableness of the rates under the circumstances of the case. On June 11, 1917, Guanica Central was permitted to withdraw its intervention without prejudice, and on July 2 the order denying the preliminary injunction was modified so that the defendant was relieved of the obligation of making further deposits of the excess in question, and the amount deposited was ordered to be returned. On July 10, 1917, an agreed statement of facts was presented wherein it was stated that the increase of rates made by the defendant was made without previous authorization or permission of the executive council and all of the documents of the executive council relating to the case were admitted as true and as evidence. The case was then submitted to the court for final decision on the pleadings and papers filed.

On August 15, 1917, Carmen Central petitioned for an intervention, which petition was granted on August 20. A final decree was entered on August 25, based upon the opinion of the court of April 30, 1917, which denied the relief prayed for subject to the right of Carmen Central to try out the question of the propriety of the new rates which were previously approved, although the defendant was ordered to keep accurate accounts and statistics of the rates and their results upon the business of the territory served by it for six months from the institution of the said rates, and to report within two weeks to the court for further action. On April 11, 1917, the people of Porto Rico and Carmen Central appealed from the final order, and the case is now pending in the circuit court of appeals.

#### THE PEOPLE OF PORTO RICO v. AMERICAN SURETY COMPANY.

This action at law in the Federal court to recover \$10,000 on a bond executed by the Porto Rico Telephone Co., a corporation now defunct, to secure the performance of the obligation of a franchise to build a telephone line, was reported upon in my annual report of 1917, page 520. Since then the court, on November 26, 1917, overruled the demurrer of the defendant and held that the bond was an obligation governed by the law of Porto Rico, and under the civil law it was not necessary that the principal on the bond be joined in an action against the surety. The penalty of the bond was held to be liquidated, the damages agreed on in advance, and the statute of limitations was held not to run against the people of Porto Rico in the action. Thereafter, on the 28th of January, 1918, after several postponements, an answer was filed by the defendant. On May 6, 1918, a consent judgment was entered for the plaintiffs in the sum of \$10,000, the principal amount of the bond, which judgment was satisfied on May 13, 1918, and the amount of \$10,000 was turned over to the treasurer of Porto Rico.

#### OPINIONS OF THE ATTORNEY GENERAL OF PORTO RICO AND RECOMMENDATIONS ON APPLICATIONS FOR PARDON AND PAROLE.

The work of the office of the attorney general of Porto Rico in regard to war activities, civil legislation, reorganization of the government, grand juries, and in many other matters is discussed under appropriate headings dealing with those matters in this report. One hundred and twenty-eight official opinions were rendered during the last year compared with 149 for the proceeding year, and 77 opinions were rendered

in regard to titles for the department of education and the irrigation service compared with 71 for the preceding year. Numerous other opinions which are not included in the above were rendered in regard to indemnity bonds and approval of contracts.

The attorney general made reports and recommendations upon 279 applications for clemency compared with 228 for the preceding year. Five full pardons, 43 conditional pardons, and 22 paroles were recommended in addition to 14 recommendations of commutation of sentences, remittance of costs or restoration of civil rights. Two cases remained pending at the close of the fiscal year. A list of the cases in which the attorney general recommended clemency is contained in Table No. 21.

Four thousand four hundred and twenty-nine vouchers and 600 salary pay rolls were examined and approved and sent to the auditor's office from the office of the attorney general during the year. The total of the vouchers and pay rolls passed up to July 20, 1918, was \$670,033.66. One thousand three hundred and thirty-four requisitions for supplies and printing were sent to the bureau of supplies, printing and transportation.

There were 174 new permanent appointments among the officers and employees of the department, 148 resignations, 4 removals, 94 temporary appointments, 40 transfers, 4 reinstatements, 174 promotions, and 6 reductions. The more important changes in the personnel are listed in table No. 48.

Respectfully submitted,

HOWARD L. KERN,  
Attorney General.

TABLE 1.—Statement showing work of supreme court for fiscal year 1917-18.

Cases pending June 30, 1917:		Cases decided during fiscal year 1917-18:	
Appeals in criminal cases.....	37	Appeals in criminal cases.....	113
Appeals in civil cases.....	64	Appeals in civil cases.....	179
Administrative appeals.....	10	Administrative appeals.....	51
Original jurisdiction.....	10	Original jurisdiction.....	59
	— 121		— 408
Cases docketed during fiscal year 1917-18:		Cases pending June 30, 1918:	
Appeals in criminal cases.....	109	Appeals in criminal cases.....	23
Appeals in civil cases.....	194	Appeals in civil cases.....	79
Administrative appeals.....	48	Administrative appeals.....	7
Original jurisdiction.....	53	Original jurisdiction.....	4
	— 404		— 123
Total.....	525	Total.....	525

TABLE 2.—Criminal cases tried in the district courts during the fiscal year 1917-18.

District Court of—	Felonies and misdemeanors.										
	Pending June 30, 1917.	Presented during fiscal year 1917-18.	Total.	Disposed of during fiscal year 1917-18.						Pending June 30, 1918.	Total.
				Convictions.	Acquittals.	Filing or dismissals by—			Transfers to other courts.		
						Petition of the fiscal.	Defective indictments.	Lack of proof or jurisdiction.			
Aguadilla.....	9	81	90	55	12	11	8	1	.....	3	90
Arecibo.....	18	73	91	72	4	3	.....	1	1	10	91
Guayama.....	34	146	180	71	13	64	.....	2	.....	30	180
Humacao.....	33	410	443	310	71	18	.....	14	.....	30	443
Mayaguez.....	3	160	163	126	20	4	16	.....	.....	.....	166
Ponce.....	55	97	152	63	17	26	.....	.....	.....	46	152
San Juan (sec. 2).....	81	479	560	211	33	70	.....	.....	.....	246	560
Total.....	233	1,446	1,679	908	170	196	24	18	1	365	1,682

<sup>1</sup> In 3 misdemeanor cases there were 2 sentences in each case.

<sup>2</sup> The difference between the total of the second column and the total of informations filed by the fiscals in the district courts (fourth column of Table 10) is due to 12 contempt cases originating in the following courts: Aguadilla 1, Arecibo 2, Humacao 9.

TABLE 2.—*Criminal cases tried in the district courts during the fiscal year 1917-18—Continued.*

District Court of—	Appeals from municipal and peace courts.										Appeals taken to supreme court.	Amount of fines and costs collected.	
	Pending June 30, 1917.	Presented during fiscal year 1917-18.	Total.	Disposed of during fiscal year 1917-18.						Pending June 30, 1918.			Total.
				Convictions.	Acquittals.	Filing or dismissals by—			Transfers to other courts.				
						Petition of the fiscal.	Defective indictments.	Lack of proof or jurisdiction.					
Aguadilla.....	35	35	19	10	5	.....	.....	.....	1	35	2	\$407.90	
Arecibo.....	66	66	45	13	8	.....	.....	.....	.....	66	13	1,736.23	
Guayama.....	25	111	136	83	25	7	15	.....	6	136	20	1,374.93	
Humacao.....	15	90	105	50	29	3	.....	19	4	105	24	3,359.06	
Mayaguez.....	1	69	70	33	20	4	.....	10	3	70	10	540.63	
Ponce.....	64	131	195	95	49	21	.....	3	7	20	195	14	3,619.96
San Juan (sec. 2)...	36	291	327	116	39	39	.....	.....	.....	133	327	27	2,466.44
Total.....	141	793	934	441	185	87	15	32	7	167	934	110	13,505.15

## RÉSUMÉ.

Pending June 30, 1917.....	374
Presented during fiscal year 1917-18.....	2,239
Total.....	2,613
Disposed of during fiscal year 1917-18.....	2,084
Pending June 30, 1918.....	532
Total.....	2,616
Convictions.....	1,349
Acquittals.....	355
Appeals taken.....	110
Amount of fines and costs collected.....	\$13,505.15

TABLE 3.—*Cases of homicide tried in the district courts during the fiscal year 1917-18.*

District court of—	Murder.				Manslaughter.				Total.
	First degree.		Second degree.		Voluntary.		Involuntary.		
	Convictions.	Acquittals.	Convictions.	Acquittals.	Convictions.	Acquittals.	Convictions.	Acquittals.	
Aguadilla.....	1		1		1	1			4
Arecibo.....								1	3
Guayama.....			1		2	1	1		5
Humacao.....	2		6	1	2	1	1		13
Mayaguez.....			1		1				2
Ponce.....			2	1	3	4		1	11
San Juan.....			2		2		1	3	8
Total.....	3		13	2	13	7	3	5	46

## RÉSUMÉ.

Cases tried.....	46
Convictions.....	32
Acquittals.....	14
Total.....	46

TABLE 4.—*Jury trials in the district courts during the fiscal year 1917-18.*

District court of—	Convictions.	Aquittals.	Filing or dismissals.	Transfers to other courts.	Total.
Aguadilla.....	9	5			14
Arecibo.....	26	2	3	1	32
Guayama.....	11	10			21
Humacao.....	17	7			24
Mayaguez.....		1			1
Ponce.....	6	11			17
San Juan.....	21	13			34
Total.....	90	49	3	1	143

TABLE 5.—*Felony cases tried in the district courts without jury, during the fiscal year 1917-18.*

District court of—	Convictions.	Aquittals.	Filing or dismissals.	Transfers to other courts.	Total.
Aguadilla.....	9		12		21
Arecibo.....	14				14
Guayama.....	24		60		74
Humacao.....	19		3		22
Mayaguez.....	10	1	9		20
Ponce.....	23	1	21		45
San Juan.....	58	4	41		103
Total.....	157	6	136		299

TABLE 6.—*Cases of misdemeanor tried originally in the district courts during the fiscal year 1917-18.*

District court of—	Convictions.	Aquittals.	Filing or dismissals.	Transfers to other courts.	Total.
Aguadilla.....	37	7	8		52
Arecibo.....	32	2	1		35
Guayama.....	36	3	16		55
Humacao.....	274	64	29		367
Mayaguez.....	116	18	11		145
Ponce.....	34	5	5		44
San Juan.....	132	16	29		177
Total.....	661	115	99		875

TABLE 7.—*Criminal cases tried in the district courts during the fiscal year 1917-18.*

Crimes.	Convictions.	Aquittals.	Filing or dismissals.	Transfers to other courts.	Total.
Against persons.....	336	68	64	6	474
Against reputation.....	7	11	3		21
Against decency.....	31	19	52		102
Against property.....	208	59	65		332
Prejudicial to administration of public justice.....	136	11	44		191
Against good morals.....	63	18	8	1	90
Involving the violation of laws enacted in the exercise of the police power.....	384	139	99	1	623
Unclassified.....	184	30	37		251
Grand total.....	1,349	355	372	8	2,084



TABLE 8.—*Comparative statement of totals showing record of criminal cases in the district courts for five years.*

Fiscal year.	Pre-sented.	Disposed of.	Convictions.	Acquittals <sup>1</sup>	Appeals to supreme court.	Pending at the end of fiscal year.
1913-14.....	1,658	1,544	975	309	68	579
1914-15.....	2,802	3,004	1,837	528	180	377
1915-16.....	2,081	2,072	1,367	353	187	396
1916-17.....	1,838	1,800	1,227	279	108	374
1917-18.....	2,239	2,084	1,349	355	110	533

<sup>1</sup> These figures do not include dismissals.TABLE 9.—*Appeals from municipal and peace courts decided in each district court during the fiscal year 1917-18.*

District court of—	Municipal courts.					Peace courts.				
	Con-victions.	Ac-quittals.	Filing or dis-missals	Trans-fers to other courts.	Total.	Con-vic-tions.	Ac-quittals.	Filing or dis-missals	Trans-fers to other courts.	Total.
Aguadilla.....	19	10	4	.....	33	.....	.....	1	.....	1
Arecibo.....	45	13	8	.....	66	.....	.....	1	.....	1
Guayama.....	74	23	21	.....	118	9	2	.....	.....	12
Humacao.....	47	27	13	.....	87	3	2	9	.....	14
Mayaguez.....	30	17	12	.....	59	3	2	2	.....	8
Ponce.....	95	46	20	7	168	.....	3	4	.....	7
San Juan.....	112	36	34	.....	182	4	3	5	.....	12
Total.....	422	172	112	7	713	19	13	22	.....	54

The above cases were tried de novo and not on the record.

TABLE 10.—*Complaints handled in fiscalias during the fiscal year 1917-19.*

District court of—	Pending in fiscalia June 30, 1917.	Presented during fiscal year 1917-18.	Total.	Informa-tions filed in district court.	Dis-missed before accusa-tions.	Trans-ferred to other courts.	Pending in fiscalia June 30, 1918.	Total.
Aguadilla.....	4	181	185	80	74	31	.....	185
Arecibo.....	4	164	168	71	94	3	.....	168
Guayama.....	.....	271	271	146	90	35	.....	271
Humacao.....	4	610	614	401	127	84	2	614
Mayaguez.....	3	365	368	180	182	12	14	268
Ponce.....	2	270	272	97	148	27	.....	272
San Juan.....	.....	829	829	479	297	51	2	829
Total.....	17	2,660	2,707	1,434	1,012	243	18	2,707

<sup>1</sup> Of the 14 cases pending in 1918 in the fiscalia of Mayaguez, 13 cases were prepared by the fiscal on June 29, 1918, but were not filed in the court until July 1, 1918.

TABLE 11.—Civil cases tried in the district courts during the fiscal year 1917-18.

District court of—	Pend- ing June 30, 1917.	On com- plaint filed in district courts and appeals from mu- nicipal courts.	Total.	Disposed of during fiscal year 1917-18.			Pend- ing June 30, 1918.	Total.	Ap- peals taken.	Amount of costs collected.
				Tried.	Filing or dis- miss- als.	Trans- fers to other courts.				
Aguadilla.....	67	207	274	177	34	3	60	274	6	\$2,553.63
Arecibo.....	699	409	1,108	297	415	1	395	1,108	7	4,138.99
Guayama.....	393	306	699	305	.....	3	391	699	7	3,123.62
Humacao.....	394	524	918	411	201	.....	306	918	39	6,745.99
Mayaguez.....	297	552	849	487	92	2	268	849	42	6,763.42
Ponce.....	423	736	1,159	523	141	7	488	1,159	22	7,049.20
San Juan.....	2,055	1,129	3,184	793	88	66	2,237	3,184	85	10,884.67
Total.....	4,328	3,863	8,191	2,993	971	82	4,145	8,191	208	41,264.62

## RÉSUMÉ.

Pending June 30, 1917.....	4,328
Presented during fiscal year 1917-18.....	3,863
Total.....	8,191
Disposed of during fiscal year 1917-18.....	4,046
Pending June 30, 1918.....	4,145
Total.....	8,191
Amount of costs collected.....	\$41,264.62

TABLE 12.—Criminal cases tried in the municipal courts during the fiscal year 1917-18.

Municipal court of—	Pend- ing June 30, 1917.	Pre- sent- ed dur- ing fiscal year 1917- 18.	Total.	Disposed of during fiscal year 1917-18 by—				Pend- ing June 30, 1918.	Total.	Ap- peals taken.	Amount of fines and costs collected for the insular treasury.
				Con- vic- tions.	Ac- quit- tals.	Filing or dis- miss- als.	Trans- fers to other courts.				
Adjuntas.....	9	375	384	284	62	38			384	9	\$271.51
Aguadilla.....	1	1,068	1,068	691	300	70	6	1	1,068	14	2,313.08
Anasco.....	2	366	368	278	53	24	13		368	5	691.52
Arecibo.....	10	1,409	1,419	1,124	234	61			1,419	12	3,302.95
Barros.....	2	365	367	244	44	71	6	2	367	8	469.02
Bayamon.....	5	2,001	2,006	1,492	413	101			2,006	107	5,208.93
Cabo Rojo.....	45	467	512	334	79	46	53		512		1,688.64
Caguas.....	26	1,676	1,702	1,253	238	202	3	6	1,702	22	4,415.46
Camuy.....	12	677	619	442	97	71	6	3	619	5	2,213.82
Carolina.....	7	838	845	662	121	49	9	4	845	20	1,176.60
Cayey.....		1,168	1,168	794	215	122	36	1	1,168	20	3,332.41
Ciales.....	5	411	416	256	115	39	3	3	416	7	782.89
Coamo.....	8	439	447	360	54	21	10	2	447		1,069.86
Fajardo.....	45	1,232	1,277	753	364	157		3	1,277	15	2,396.27
Guayama.....	11	894	905	607	191	102		5	905	40	1,473.68
Humacao.....		782	782	515	103	88	74	2	782	6	1,575.03
Juana Diaz.....	6	1,696	1,612	1,237	234	139		2	1,612	9	1,491.91
Lares.....	1	392	393	240	70	81	2		393	6	429.45
Manati.....	23	709	732	499	93	126	13	1	732	23	1,890.34
Mayaguez.....	1	1,779	1,780	1,258	325	196		1	1,780	40	2,262.40
Patillas.....	14	406	420	303	95	19		3	420	4	640.45
Ponce.....	3	3,139	3,142	2,434	474	221	13		3,142	51	4,002.24
Rio Grande.....	8	443	456	275	110	49	11	11	456	10	908.80
Rio Piedras.....	7	768	775	602	119	49	4	1	775	25	1,979.61
Salinas.....	15	917	932	620	167	115	26	4	932	17	2,115.09
San German.....		890	890	547	188	127	28		890	9	1,376.78
San Juan.....	12	2,331	2,343	1,636	596	108		4	2,343	85	7,304.23
San Lorenzo.....	26	650	676	432	167	77		1	676	10	1,110.42
San Sebastian.....		458	458	334	80	32	11	1	458	8	859.71
Ututo.....		684	684	447	141	43		3	684	7	628.45
Vega Baja.....	20	765	785	492	161	108	23	2	785	11	1,237.97
Vieques.....	3	355	358	267	26	42	21	2	358	3	1,671.44
Yabucoa.....	9	1,137	1,146	683	224	93	132	4	1,146	5	1,158.29
Yauco.....	20	1,150	1,170	806	190	155	17	2	1,170	13	2,180.97
Total.....	355	32,632	32,987	23,201	6,152	3,042	519	73	32,987	626	65,530.30

## RÉSUMÉ.

Pending June 30, 1917.....	355
Presented during fiscal year 1917-18.....	32,632
<b>Total.....</b>	<b>32,987</b>
Disposed of during fiscal year 1917-18.....	32,914
Pending June 30, 1918.....	73
<b>Total.....</b>	<b>32,987</b>
Appeals to district courts.....	626
Amount of fines and costs collected.....	\$65,520.30

TABLE 13.—Civil cases tried in the municipal courts during the fiscal year 1917-18.

Municipal court of—	Pend- ing June 30, 1917.	Pre- sented during fiscal year 1917-18.	Total.	Disposed of during fiscal year 1917-18.			Pend- ing June 30, 1918.	Total.	Appeals taken.	Amount of costs collected.
				Tried.	Filing or dis- miss- als.	Trans- fers to other courts.				
Adjuntas.....	39	23	62	11	6	.....	45	62	.....	\$244.36
Aguedilla.....	34	88	122	69	41	.....	12	122	3	713.27
Anasco.....	17	28	45	13	13	.....	19	45	.....	181.10
Arecibo.....	357	137	494	59	361	.....	74	494	2	822.76
Barros.....	29	12	41	4	2	.....	35	41	.....	91.86
Bayamon.....	525	234	759	130	11	1	617	759	7	1,458.47
Cabo Rojo.....	16	54	70	38	17	1	14	70	.....	283.41
Caguas.....	234	179	413	91	22	1	299	413	4	1,148.18
Camuy.....	63	68	131	55	46	.....	30	131	.....	581.05
Carolina.....	67	24	91	11	6	.....	74	91	2	199.78
Cayey.....	208	96	299	45	11	.....	243	299	4	855.19
Ciales.....	73	55	131	42	23	.....	66	131	2	538.71
Coamo.....	63	22	85	14	1	2	68	85	2	138.80
Fajardo.....	533	89	622	44	2	1	575	622	5	571.10
Guayama.....	131	67	198	63	32	2	101	198	2	483.50
Humacao.....	36	89	125	18	1	.....	106	125	1	513.90
Juana Diaz.....	24	55	79	30	10	.....	39	79	.....	435.20
Lares.....	16	47	63	19	28	.....	16	63	1	271.05
Manati.....	216	85	301	67	95	.....	139	301	1	611.07
Mayaguez.....	128	289	415	152	173	.....	139	415	18	1,510.98
Patillas.....	15	25	40	7	2	2	29	40	.....	188.55
Ponce.....	656	261	917	152	472	3	290	917	10	1,570.99
Rio Grande.....	62	60	122	45	3	.....	74	122	4	436.54
Rio Piedras.....	54	69	123	52	14	.....	57	123	6	405.15
Salinas.....	78	31	109	17	9	.....	83	109	3	290.25
San German.....	37	112	149	80	22	.....	47	149	6	971.70
San Juan.....	1,808	1,076	2,884	729	103	2	2,050	2,884	18	4,154.69
San Lorenzo.....	308	38	346	15	.....	.....	331	346	1	190.50
San Sebastian.....	34	61	95	36	45	.....	14	95	2	499.99
Utua.....	30	64	94	28	32	.....	34	94	2	567.48
Vega Baja.....	28	27	55	13	16	.....	26	55	1	285.91
Vieques.....	20	13	33	7	3	.....	23	33	.....	112.50
Yabucoa.....	102	45	147	21	16	.....	110	147	.....	367.13
Yauco.....	94	83	177	51	13	.....	113	177	2	531.54
<b>Total.....</b>	<b>6,128</b>	<b>3,709</b>	<b>9,837</b>	<b>2,228</b>	<b>1,661</b>	<b>15</b>	<b>5,943</b>	<b>9,837</b>	<b>109</b>	<b>22,256.34</b>

## RÉSUMÉ.

Pending June 30, 1917.....	6,128
Presented during fiscal year 1917-18.....	3,709
<b>Total.....</b>	<b>9,837</b>
Disposed of during fiscal year 1917-18.....	3,894
Pending June 30, 1918.....	5,943
<b>Total.....</b>	<b>9,837</b>
Appeals to district courts.....	109
Amount of costs collected.....	\$22,256.34

TABLE 14.—*Criminal cases tried in the peace courts during the fiscal year 1917-18.*

Court of peace of—	Pending June 30, 1917.	Presented during fiscal year 1917-18.	Total.	Disposed of during fiscal year 1917-18 by—				Pending June 30, 1918.	Total.	Appeals to district courts.	Fines collected.	Expenses of courts.	
				Convictions.	Acquittals.	Filing or dismissals.	Transfers to other courts.					Salaries.	Materials and rent of houses.
Aguada.....		9	9	9					9		\$9.00	\$1,032.00	\$8.00
Aguadilla.....		220	220	206	14				220	1	134.75	720.00	
Agua Buenas.....		58	58	19	39				58		33.00	360.00	15.00
Aibonito.....		125	125	114	1	2		8	125		95.55	360.00	12.00
Añasco.....		48	48	39	8	1			48		15.00	720.00	
Arroyo.....		133	133	125	6	2			133		110.93	420.00	36.86
Barceloneta.....		145	145	113	27	3	2		145		141.78	720.00	
Barranquitas.....		94	94	81	13				94		84.10	360.00	
Bayamon.....		423	423	339	68	18		8	423	1	626.15	480.00	22.27
Caguas.....		252	252	230	20	2			252		399.90	840.00	20.00
Cañafío.....		396	396	319	63	14			396	2	308.50	360.00	7.60
Cayey.....		170	170	158	10	2			170		261.45	900.00	10.00
Celba.....		63	63	56	6	1			63		105.00	360.00	8.27
Cidra.....		44	44	37	7				44		32.00	360.00	
Comerio.....		109	109	83	13	12		1	109		135.70	720.00	15.00
Corozal.....		17	17	17					17		26.50	365.00	
Culebra.....		14	14	7	7				14		22.00		
Dorado.....		40	40	37	2			1	40	2	96.00	540.00	
Fajardo.....	14	114	128	58	5	32		33	128		82.00	600.00	
Guánica.....	2	34	36	29	2		2	3	36		31.15	600.00	135.00
Guayama.....		287	287	256	23	1		7	287	8	141.52	720.00	
Guayanilla.....		48	48	47	1				48		41.00	720.00	22.00
Guaynabo.....		31	31	27	4				31		56.00	360.00	
Gurabo.....	2	156	158	140	16			2	158		176.50	360.00	20.00
Hatillo.....		142	142	115	23	4			142		193.75	516.00	13.33
Hormigueros.....		86	86	60	4	14	3	5	86		58.00	360.00	18.25
Humacao.....		166	166	141	16	7		2	166	12	161.00	1,080.00	
Isabela <sup>1</sup> .....	4	70	74	72	2			2	74		44.50	720.00	21.00
Jayuya.....		182	182	142	37	3			182		69.67	360.00	9.00
Juncos.....		161	161	135	15	3	7	1	161		189.30	415.20	15.00
Lajas.....		29	29	28		1			29		21.00	696.00	38.39
Las Marias.....		5	5	4				1	5		4.00	600.00	13.50
Las Piedras.....		42	42	40	2				42		43.50	360.00	
Loíza <sup>1</sup> .....	14	125	139	115	12	4		8	139		235.75	600.00	
Luquillo.....		58	58	52	2	3		1	58		96.50	360.00	
Manatí.....		375	375	339	21	11		4	375		248.18	360.00	
Maricao.....		22	22	11	11				22		18.00	720.00	10.00
Maunabo.....		22	22	21	1				22		17.00	540.00	8.00
Mayaguez.....	5	625	630	524	55	27	8	16	630	8	691.39	2,100.00	45.00
Moca.....		18	18	16	2				18		14.80	444.00	
Morovis.....		37	37	31	6				37		54.70	480.00	30.10
Naguabo.....		173	173	145	14	9		5	173	2	230.00	600.00	45.00
Naranjito.....		56	56	43	13				56		61.25	360.00	5.20
Peñuelas.....		60	60	36	2	11	5	6	60	5	31.40	360.00	5.00
Ponce.....		573	573	498	34	40		1	573	4	402.87	2,160.00	14.40
Quebradillas.....		52	52	52					52		58.00	360.00	10.00
Rincon.....		53	53	50	3				53		38.00	720.00	10.40
Rio Grande.....		38	38	34	3	1			38	1	84.25	600.00	53.00
Sabana Grande.....		97	97	87	10				97		62.50	600.00	16.28
Salinas.....	4	93	97	79	4	6		8	97		125.60	780.00	10.60
San German.....	2	229	231	94	134	3			231		65.25	720.00	
San Juan.....		1,878	1,878	1,469	355	48		6	1,878	6	1,684.06	2,160.00	343.31
Santa Isabel <sup>1</sup> .....	6	133	139	120	7	12			139	1	127.50	600.00	8.84
Toe Alta <sup>1</sup> .....	2	78	80	68	7	3		2	80		82.91	360.00	
Toe Baja.....		49	49	38	11				49	1	99.05	420.00	18.55
Trujillo Alto.....		17	17	17					17		49.80	552.00	
Vega Alta.....		102	102	80	14	8			102		50.00	720.00	
Villaiba.....		38	38	22	6	9		1	38		27.00		
Yabucoa.....		113	113	102	2			8	113		140.00	420.00	
Total.....	55	9,027	9,062	7,416	1,183	317	29	137	9,082	54	8,737.96	36,180.20	1,097.15

<sup>1</sup> The cases appearing pending on June 30, 1917, were not reported by the courts in the fiscal year 1916-17.

The peace courts have no jurisdiction in civil cases.

## RÉSUMÉ

Pending June 30, 1917.....	55
Presented during fiscal year 1917-18.....	9,027
<b>Total.....</b>	<b>9,082</b>
Disposed of during fiscal year 1917-18.....	8,945
Pending June 30, 1918.....	137
<b>Total.....</b>	<b>9,082</b>
Fines collected.....	\$8,737.96
Expenses of court:	
Salaries.....	36,180.20
Materials.....	1,067.15
<b>Total.....</b>	<b>37,277.35</b>

TABLE 15.—*Cases of prohibited weapons tried in the district courts during the fiscal year 1917-18.*

District court of—	Pending June 30, 1917.	On complaint filed in district courts.	On appeal from municipal and peace courts.	Total.	Disposed of during fiscal year 1917-18.			Pending June 30, 1918.	Total.	Confiscated weapons.			
					Convictions.	Acquittals.	Filing, dismissal or transfers to other courts.			Revolvers.	Knives.	Machetes.	Other weapons.
Aguadilla.....		30	1	31	25	3	3		31	11	4		10
Arecibo.....		2		2	2				2			2	
Guayama.....	3		9	12	9	2		1	12	1	2		4
Humacao.....		3	2	5	4	1			5	1		1	
Mayaguez.....		37		37	34	3			37	10	21		3
Ponce.....			4	4	3	1			4				
San Juan.....	14		6	10	3	2	2	3	10				
<b>Total.....</b>	<b>7</b>	<b>72</b>	<b>22</b>	<b>101</b>	<b>80</b>	<b>12</b>	<b>5</b>	<b>4</b>	<b>101</b>	<b>23</b>	<b>27</b>	<b>5</b>	<b>17</b>

<sup>1</sup> These four cases were not reported by the court in the fiscal year 1916-17.

TABLE 16.—Cases of prohibited weapons tried in the municipal courts during the fiscal year 1917-18.

Municipal court of—	Pending June 30, 1917.	Presented during fiscal year 1917-18.	Total.	Disposed of during fiscal year 1917-18.			Pending June 30, 1918.	Total.	Confiscated weapons.			
				Convictions.	Acquittals.	Filing, dismissals, or transfers to other courts.			Revolvers.	Knives.	Machetes.	Other weapons.
Adjuntas.....	2	13	15	12		3		15		6		6
Aguadilla.....		16	16	13	3			16		7		9
Añasco.....												
Arecibo.....	1	60	61	55	5	1		61	13	24	4	14
Barros.....		20	20	15	1	4		20	2	7	1	5
Bayamon.....												
Cabo Rojo.....												
Caguas.....												
Camuy.....		14	14	13	1			14	3	8		8
Carolina.....		40	40	37	3			40	4	13	8	15
Cayey.....												
Ciales.....		6	6	6				6		4	2	
Coamo.....	1	5	6	6				6	3	2	1	
Fajardo.....												
Guayama.....												
Humacao.....		2	2			2		2				
Juana Diaz.....		38	38	36	1	1		38	11	8	1	17
Lares.....		13	13	13				13		9		4
Manati.....		1	1	1				1		1		
Mayaguez.....												
Patillas.....		11	11	9	2			11	3	2		6
Ponce.....		13	13	12		1		13	8	2	1	2
Rio Grande.....												
Rio Piedras.....	1	44	45	40	5			45	10	15	3	17
Salinas.....		3	3	1	1			3	1			
San Germán.....		2	2			1		2				
San Juan.....		5	5	2		2		5	2			
San Lorenzo.....		12	12	10	1			12	4	3	1	4
San Sebastián.....		27	27	22	3	2		27	1	18		3
Utrado.....		8	8	7	1			8	2	3		2
Vega Baja.....		14	14	13	1			14	1	10	1	1
Vieques.....		20	20	19	1			20	10	4	1	5
Yabucoa.....		1	1	1				1		1		
Yauco.....		26	26	26				26	3	16		7
Total.....	5	414	419	369	30	20		419	81	163	24	120

TABLE 17.—*Cases of prohibited weapons tried in the justice of the peace courts during the fiscal year 1917-18.*

Court of—	Pre- sented during fiscal year 1917-18.	Disposed of during fiscal year 1917-18 by—			Total.	Confiscated weapons.			
		Convic- tions.	Acquit- tals.	Filing, dismissals or trans- fers to other courts.		Revolv- ers.	Knives.	Ma- chets.	Other weap- ons.
Aguada.....	8			8	8				
Aguadilla.....									
Agua Buenas.....	17	17			17	1	3	2	11
Albionito.....	17	17			17	7	1	1	6
Añasco.....	15	15			15		15		
Arroyo.....	5	4	1		5	3			1
Barceloneta.....	31	28		3	31	5	7	5	14
Barranquitas.....	3	3			3	1			2
Bayamon.....	37	35	1	1	37	22	7	1	6
Caguas.....	114	109	5		114	28	35	7	39
Cataño.....	9	9			9	2	3		4
Cayey.....	25	24	1		25	9	11	1	2
Celba.....	30	28	1	1	30	9	5	13	6
Cidra.....	12	12			12		2	2	8
Comerio.....	22	22			22	5	8		9
Corozal.....	3	3			3	2	1		
Culebra.....									
Dorado.....	20	18	1	1	20	4	5	2	8
Fajardo.....	68	49	5	14	68	5	21	7	16
Guánica.....	4	4			4	1	2		1
Guayama.....	44	42	1	1	44	13	9	4	16
Guayanilla.....	9	9			9	3	4		2
Guainabo.....	17	16	1		17	1	5	9	2
Gurabo.....	16	16			16	5	2	2	7
Hatillo.....	27	25		2	27	7	14	1	5
Hormigueros.....	8			8	8				
Humacao.....	28	27	1		28	10	8	1	9
Isabela.....	9			9	9	1	6		2
Jayuya.....	15	14	1		15	2	7	2	4
Juncos.....	47	41	2	4	47	13	15	2	17
Lajas.....									
Las Marías.....									
Las Piedras.....	15	15			15		6	4	5
Loíza.....	19	19			19	3	7	5	4
Luquillo.....	27	26		1	27	5	5	3	13
Manatí.....	27	25		2	27	4	8	1	12
Maricao.....	5	5			5		2	1	2
Maunabo.....	3	3			3		1	1	1
Mayaguez.....									
Moca.....	12			12	12		7		5
Moravia.....	7	7			7	3	2		2
Naguabo.....	55	53	1	1	55	9	12	21	13
Naranjito.....	12	12			12	4	1		7
Peñuelas.....	3	2	1		3				3
Ponce.....	71	70		1	71	19	26	3	23
Quebradillas.....	5	5			5		5		
Rincon.....	8			3	8				
Río Grande.....	24	24			24	8	3	4	9
Sabana Grande.....	14	14			14	1	8		5
Salinas.....	14	12		2	14	10	1	1	
San German.....									
San Juan.....	76	72	3	1	76	25	38	3	40
Santa Isabel.....	18	17		1	18	5	8	1	3
Tos Alta.....	17	14	2	1	17	6	2	1	8
Tos Baja.....	10	10			10	5	1		4
Trujillo Alto.....	12	10		2	12	1	5	2	3
Vega Alta.....	3	3			3	2	1		3
Villalba.....	3		1		3				
Yabucoa.....	18	17	1		18	8	2	6	5
Total.....	1,138	1,029	30	79	1,138	277	347	121	368

No cases were pending on June 30, 1917, and June 30, 1918.

TABLE 18.—*Registries of property, fiscal year 1917-18.*

Registry of property of —	Municipalities comprised therein.	Area in square miles.	Population, census of 1910.	Number of employees.	Cost of salaries and house rent of each registry.	Documents.				Documents regis- tered during fiscal year 1917-18.				Documents withdrawn.	Administra- tive appeals before Supreme Court.		Amount of fees collected.	Total of property involved in the docu- ments registered.	
						Pending June 30, 1917.	Presented dur- ing fiscal year 1917-18.	Total.	Correct.	With curable de- fects.	With incurable defects.	Total.	Decided in favor of the registrar.		Decided against the registrar.	Total.		Urban.	Rural.
Aguadilla.....	Aguadilla, Aguada, Isabela, Lares, Moca, and San Sebastian.	282.58	105,052	384,000.00	.....	830	830	611	144	15	770	.....	60	.....	.....	\$7,727.45	214	1,192	
Arecibo.....	Arecibo, Barceloneta, Camuy, Ciales, Hatillo, Jayuya, Manati, Morovis, Quebradillas, and Utuado.	471.47	173,335	6,349.99	5	1,968	2,003	1,539	313	34	1,896	3	114	1	2	313,507.00	502	2,283	
Caguas.....	Agua Buenas, Barranquitas, Barros, Caguas, Gurabo, Juncos, and San Lorenzo.	284.67	98,092	4,720.00	.....	1,076	1,076	811	134	29	974	.....	102	5	1	6,041.90	498	777	
Guayama.....	Albionito, Arroyo, Cayey, Cidra, Guayama, Patillas, and Salinas.	299.09	89,291	4,745.00	.....	820	820	501	216	60	777	.....	43	4	4	8,750.75	228	756	
Humacao.....	Ceiba, Culebra, Fajardo, Humacao, Luquillo, Manabo, Naguabo, Las Piedras, Viques, and Yabucoa.	327.18	98,362	4,529.73	.....	677	677	465	78	61	634	.....	43	4	6	10,5115.90	254	596	
Mayaguez.....	Alaseco, Hormigueros, Las Marias, Mayaguez, and Rincon.	157.74	74,157	5,750.00	2	1,101	1,103	801	142	59	1,002	.....	101	1	1	2,692.15	465	871	
Ponce.....	Adjuntas, Coamo, Guayanilla, Juana Diaz, Peñuelas, Ponce, Santa Isabel, and Villalba.	469.74	155,988	6,410.00	29	1,707	1,736	1,488	73	29	1,590	26	120	3	.....	312,446.42	884	1,742	
San German.....	Cabo Rojo, Guanica, Lajas, Maricao, Sabana Grande, San German, and Yauco.	329.25	102,961	4,660.00	.....	965	965	818	74	31	923	.....	42	.....	.....	8,501.56	278	1,499	
San Juan, sec- tion 1.	Carolina, Loiza, Rio Grande, Rio Piedras, San Juan, and Trujillo Alto.	159.82	113,462	8,706.88	83	2,039	2,121	1,844	138	10	1,992	1	129	4	4	816,767.10	1,872	592	
San Juan, sec- tion 2.	Bayamon, Comerio, Corozal, Dorado, Guay- nabo, Naranjito, Toa Alta, Toa Baja, Vega Alta, and Vega Baja.	272.90	107,312	4,512.00	.....	882	882	638	113	11	760	.....	62	1	.....	1,527.75	310	655	
Total.....			1,118,012	48,553.60	119	12,065	12,214	9,544	1,425	339	11,308	30	816	23	18	41,881,091.98	5,505,10,933		

In addition to the above personnel there is a clerk at large for registries of property at the annual salary of \$600. The amount expended by the registries of property for office supplies, stationery, etc., as per vouchers approved up to July 20, 1918, was \$2,240.



TABLE 19.—*Registries of property, agricultural loans, fiscal year 1917-18.*

Registry of property of—	Documents pending June 30, 1917.	Documents presented during fiscal year 1917-18.	Total.	Documents registered.		Documents refused.	Documents withdrawn.	Documents pending June 30, 1918.	Total.	Amount of fees collected.
				Correct.	With defects.					
Aguadilla.....		69	69	64	1		4		69	\$237.00
Arecibo.....		79	79	79					79	457.50
Caguas.....		195	195	146	5	3	41		195	705.50
Guayama.....		52	52	46	2	3	1		52	248.00
Humacao.....		103	103	73	1	23	6		103	632.50
Mayaguez.....		204	204	181	3	9	11		204	792.50
Ponce.....		55	55	55					55	220.00
San German.....		190	190	123	43	2	12		190	882.00
San Juan, section 1.....	2	20	22	22					22	255.00
San Juan, section 2.....		67	67	67					67	222.00
Total.....	2	1,034	1,036	866	55	40	75		1,036	4,661.00

TABLE 20.—*Commercial registries, fiscal year 1917-18.*

Registry of property of—	Documents presented during fiscal year 1917-18.	Documents registered.	Documents withdrawn.	Total	Amount of fees collected.
San Juan, section 2.....	182	176	6	182	\$378.45
Ponce.....	75	72	3	75	426.51
Total.....	257	248	9	257	1,304.96

TABLE 21.—*Cases in which reports were made by the Attorney General upon applications for clemency during the fiscal year 1917-18, and those pending June 30, 1918.*

Pending cases June 30, 1917.....	13	Disposed of during fiscal year 1917-18—Cont'd.	
Presented during fiscal year 1917-18.....	269	Commutations—	
Total.....	282	Favorable recommendations.....	3
Disposed of during fiscal year 1917-18:		Adverse recommendations.....	20
Pardon cases—			23
Favorable recommendations.....		Petitions for restoration of civil rights—	
Full pardons.....	5	Favorable recommendations.....	9
Conditional pardons.....	43	Adverse recommendations.....	5
	48		14
Adverse recommendations.....	129	Remittance of costs—	
No action for having served term.....	4	Favorable recommendations.....	2
Paroles—		Adverse recommendations.....	0
Favorable recommendations.....	181		2
	22	Pending cases June 30, 1918.....	3
Adverse recommendations.....	37	Total.....	293
	59		

## FULL PARDONS FAVORABLY RECOMMENDED BY THE ATTORNEY GENERAL.

Name of applicant.	Offense.	Term of sentence.	Actual term served.
Victor Egipetaco González	Gambling.....	30 days.....	20 days.
José María Codasno Ortiz..	Parricide.....	40 years.....	19 years, 7 months, 4 days.
Juan de la Paz León.....	Murder, second degree.....	20 years.....	8 years, 9 months, 6 days.
Juan Rodríguez Valdejuil	Adulteration of milk.....	1 month.....	13 days.
Angel Medori Casellas.....	Involuntary homicide.....	10 years.....	7 years, 10 months, 25 days.

TABLE 21.—Cases in which reports were made by the Attorney General upon applications for clemency during the fiscal year 1917-18, and those pending June 30, 1918—Continued.

## CONDITIONAL PARDONS FAVORABLY RECOMMENDED BY THE ATTORNEY GENERAL.

Name of applicant.	Offense.	Term of sentence.	Actual term served.
Evaristo Torres.....	Breach of the peace.....	3 months, 2 days.....	1 month, 25 days.
Eusebio Santana.....	Assault and battery.....	2 months.....	25 days.
Baldomero Berríos.....	Burglary, second degree.....	6 months, 2 days.....	2 months.
Antonio Baró.....	Violation of section 328, Penal Code.....	6 months.....	2 months 15 days.
Enrique Cano Torres.....	Against public justice.....	90 days.....	1 month, 11 days.
Victoriano C. Cruz.....	Aggravated assault and battery.....	4 months.....	3 months.
Alejandro Charneco Ruiz.....	Involuntary homicide.....	1 year.....	7 months, 20 days.
Lucrecia Guadalupe.....	Assault and battery.....	6 months.....	3 months, 25 days.
Benito Hernández Machín.....	Adulteration of milk.....	.....do.....	29 days.
Francisco López Acosta.....	Violation of election laws.....	2 years.....	1 year, 1 day.
José de Jesús Pastrana.....	Petit larceny.....	30 days.....	25 days.
Buenaventura Pérez Lequerica.....	Assault and battery.....	2 years.....	1 year, 2 months.
Antonio Piasco Márquez.....	Forgery and false pretense.....	1 year, 3 months, 2 days.....	3 months, 11 days.
Telésforo Rivera.....	Seduction.....	3 years.....	7 months, 9 days.
Damacio Rivera.....	Assault and battery.....	2 years.....	6 months, 26 days.
Antonio Sánchez Román.....	Petit larceny.....	6 months.....	4 months, 12 days.
Vicente Varela.....	Assault and battery.....	1 year, 6 months, 1 day.....	5 days.
Pedro Villar Jiménez.....	Perjury.....	1 year.....	2 months, 24 days.
José Mándes Vázquez.....	Murder and homicide; voluntary homicide.....	33 years.....	1 year, 9 months, 23 days.
Francisco Almodóvar.....	Embezzlement.....	At the reform school until he reaches majority.....	3 years, 3 months, 15 days.
Clemente Amadeo.....	Burglary.....	.....do.....	5 years.
Rafael Colón.....	Petit larceny.....	.....do.....	4 years, 11 months, 4 days.
Casildo Concepción.....	.....do.....	.....do.....	7 years, 3 months.
Marcelino Coto.....	.....do.....	.....do.....	8 years, 2 months, 28 days.
Rosa de León.....	.....do.....	.....do.....	6 years.
Ambrosio Librán.....	.....do.....	.....do.....	7 years, 8 months, 14 days.
José A. Martínez.....	Embezzlement.....	.....do.....	6 years, 5 months, 26 days.
José Méndez.....	Petit larceny.....	.....do.....	4 years, 8 months, 26 days.
Ciprián Monserrat.....	Embezzlement.....	.....do.....	3 years, 9 months, 26 days.
Isaías Natal.....	Burglary, second degree.....	.....do.....	1 year, 23 days.
Ramón Pérez.....	Petit larceny.....	.....do.....	1 year, 10 months, 2 days.
Andrés Reyes.....	.....do.....	.....do.....	4 years, 4 months, 17 days.
Francisco Ríos.....	.....do.....	.....do.....	1 year, 5 months, 26 days.
Domitilo Soto.....	.....do.....	.....do.....	4 years.
Vicente Rivera.....	Burglary, second degree.....	.....do.....	3 years, 3 months, 3 days.
Andrés Rodríguez.....	Petit larceny.....	.....do.....	6 years, 2 months, 26 days.
José Ruiz Sosa.....	Burglary, second degree.....	.....do.....	2 years, 22 days.
Rosario Salgado.....	Burglary.....	.....do.....	5 years, 2 months, 27 days.
Hipólito Simldey.....	.....do.....	.....do.....	3 years, 6 months, 29 days.
Seturmino Texidor.....	Rape.....	.....do.....	3 years, 6 months, 14 days.
Emilio Torres.....	Petit larceny.....	.....do.....	7 years, 9 months, 21 days.
José Ríos.....	.....do.....	.....do.....	6 years, 20 days.
Leureano Cardona.....	Rape.....	.....do.....	4 years, 11 months, 2 days.

## PAROLES FAVORABLY RECOMMENDED BY THE ATTORNEY GENERAL.

José Santiago Torres.....	Arson, first degree.....	20 years.....	14 years, 1 month 8 days.
Manuel de Aldrey.....	Embezzlement.....	5 years.....	1 year, 8 months, 9 days.
Walter Anderson.....	Murder, second degree.....	18 years.....	7 years, 9 months, 26 days.
José Berríos.....	Seduction.....	2 years.....	1 year, 2 months, 26 days.
Gregorio Burgos.....	Involuntary homicide.....	4 years.....	1 year, 11 months, 1 day.
Eduardo Cordero.....	Voluntary homicide.....	3 years.....	2 years, 11 months, 27 days.
Ramón Coto.....	Murder, second degree.....	15 years.....	11 years, 9 months, 18 days.
Isaías de la Cruz.....	Homicide.....	29 years, 4 months, 2 days.....	25 years, 1 month, 1 day.

TABLE 21.—*Cases in which reports were made by the Attorney General upon applications for clemency during the fiscal year 1917-18, and those pending June 30, 1918—Continued.*

Name of applicant.	Offense.	Term of sentence.	Actual term served.
Juan Charneco Cabán.....	Assault and battery and prohibited weapon.	2 years, 30 days.....	1 year, 5 months, 1 day.
José Díaz Pérez.....	Rape.	8 years.....	3 years, 1 month, 15 days.
José García.....	Assault and battery.....	2 years.....	1 year, 2 months, 19 days.
Alejandro García.....	Perjury.....	4 years.....	1 year, 5 months, 4 days.
Manuel González de León..	Murder, second degree.....	17 years.....	6 years, 11 months, 28 days.
Pedro Landrón Maldonado.	Voluntary homicide.....	6 years.....	1 year, 11 months, 16 days.
Carmelo Mata García.....	Attempt to commit homicide.	5 years.....	1 year, 6 months, 28 days.
Angel Medori Casellas.....	Involuntary homicide.....	10 years.....	7 years, 10 months, 25 days.
Andrés Morales Bujo.....	Murder, second degree.....	25 year.....	15 years, 2 months, 18 days.
Carlos Peraza Nieves.....	Violation article 444, Penal Code.	2 years.....	1 year, 4 months, 30 days.
Miguel Reyes.....	Assisting attempt to commit rape.	3 years.....	2 years, 1 month, 5 days.
Bautista Rodríguez Echevarría.	Voluntary homicide.....	10 years.....	6 years, 4 months 22 days.
Ricardo Santos Ruiz.....	Assault and battery.....	2 years.....	1 year, 2 months, 23 days.
Luis Rosa.....	Burglary, second degree.	At the reform school until he reaches majority.	5 years.

COMMUTATIONS FAVORABLY RECOMMENDED BY THE ATTORNEY GENERAL.

Natalio Feliolano Crespo..	Concealed weapons.....	60 days.....	39 days.
José Hernández Pérez.....	Murder, first degree.....	Imprisonment for life.....	1 year 6 months 15 days.
Eleuterio Soto Quiñones..	Murder, second degree, and voluntary homicide.	Imprisonment for life and 10 years.	7 years 2 months.

CIVIL RIGHTS FAVORABLY RECOMMENDED BY THE ATTORNEY GENERAL.

Pedro Ardín Román.....	Forgery.....	1 year.....	1 year.
Miguel García Correa.....	Violation sec. 260, public peace.	1 year 6 months.....	1 year 6 months.
Agustín Prieto.....	Voluntary homicide.....	3 years.....	3 years.
Pedro Rosa Rodríguez.....	Grand larceny.....	2 years.....	2 years.
Cándido Ruiz Roldán.....	Perjury.....	1 year.....	1 year.
Felipe Santana Villafañe..	Voluntary homicide.....	10 years.....	10 years.
José Valantín Vega.....	Rape.....	5 years.....	5 years.
Francisco Castañeda Serano.	Attempt to kill.....	7 years.....	7 years.
Gil Vázquez Torres.....	Voluntary homicide.....	.....do.....	Do.

CONDONATIONS FAVORABLY RECOMMENDED BY THE ATTORNEY GENERAL.

Marcelino Fuentes Rodríguez.	Failure to pay costs.....	\$66.10.....	
Sidney J. Hudders.....	.....do.....	\$30.25.....	

TABLE 22.—*Civil cases in which The People of Porto Rico had an interest and in which there have been decisions during the fiscal year.*

UNITED STATES SUPREME COURT.

Title of action.	Nature thereof.	Judgment.
The People of Porto Rico v. José Muratti.	Writ of error.....	For the Government.
The People of Porto Rico v. Carlos Tapia.	Appeal (Territorial status).....	Do.

TABLE 22.—*Civil cases in which The People of Porto Rico had an interest and in which there have been decisions during the fiscal year—Continued.*

## DISTRICT COURT OF THE UNITED STATES FOR PORTO RICO.

Title of action.	Nature thereof.	Judgment.
Ralph S. Rounds v. St. John's Gas Co. (Ltd.).	Motion for an order directing payment of taxes.	Motion denied.
West India & Panamá Telegraph Co. et al, v. Public Service Commission.	Injunction to restrain enforcement of order of Public Service Commission, in re cable rates.	See discussion, supra.
The People of Porto Rico v. American Surety Co. of New York.	Action to recover on surety bond.	For the government. Judgment for \$10,000 entered and satisfied.
Porto Rican American Tobacco Co. et al, v. Treasurer of Porto Rico.	Injunction to restrain enforcement of stamp guarantee law.	See comments, supra.
The People of Porto Rico v. American Railroad Co. of Porto Rico.	Action to restrain an increase in freight rates, etc.	Injunction denied and appealed.
Fortuna Estates v. Henna et al, and The People of Porto Rico, intervenor.	Injunction to restrain taking of irrigation water.	Decided against the government on July 16, 1918. See comments, supra.
H. H. Scoville et al, v. Commissioner of Health, et al.	Injunction to restrain sale of land and building of tuberculosis sanatorium.	See comments, supra.
Compañía de los Ferrocarriles de Puerto Rico v. Treasurer of Porto Rico.	Injunction to restrain collection of taxes.	Do.

## SUPREME COURT OF PORTO RICO.

Julio Otero Rivera et al. v. The People of Porto Rico.	Declaration of heirs.....	For petitioners.
Francisco Fernandes Navas v. R. Oben and the Commissioner of the Interior.	Recovery of certain sum of money.	For the government.
Junta Escolar de Cidra v. Commissioner of Education.	Mandamus.....	Dismissed.
J. Ochoa y Hno. v. Municipal Judge of San Juan.	.....do.....	For the petitioners.
M. de la Pila Iglesias et al. v. Executive Secretary.	.....do.....	Do.
Juan Francisco de Jesus López v. The People of Porto Rico.	Possessory title proceedings.....	For the government
The People of Porto Rico v. Mateo Fajardo.	Recovery of money.....	Dismissed.
Do.	.....do.....	Do.
South Porto Rico Sugar Co. v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	Complaint sustained on demurrer.
Fortuna Estates v. Treasurer of Porto Rico.	.....do.....	Do.
Do.	.....do.....	Do.
Do.	.....do.....	Do.
Do.	.....do.....	Do.
Ensenada Estates v. Treasurer of Porto Rico.	.....do.....	Do.
Do.	.....do.....	Do.
Do.	.....do.....	Do.
Do.	.....do.....	Do.
Charles L. Crahore v. Treasurer of Porto Rico.	.....do.....	Do.
Central Aguirre Co. v. Treasurer of Porto Rico.	.....do.....	Do.
Russell & Co. v. Treasurer of Porto Rico.	.....do.....	Do.
West India Oil Co. v. Treasurer of Porto Rico.	.....do.....	Do.
Santiago Iglesias v. Executive Secretary.	Mandamus.....	For the government.
Hermínio Díaz Navarro v. The Attorney General.	.....do.....	Do.
Porto Rico Distilling Co. v. Treasurer of Porto Rico.	Recovery of taxes.....	Do.

TABLE 22.—*Civil cases in which The People of Porto Rico had an interest and in which there have been decisions during the fiscal year—Continued.*

## DISTRICT COURTS OF PORTO RICO.

Title of action.	Nature thereof.	Judgment.
<b>GUAYAMA.</b>		
The People of Porto Rico v. Carlos H. Blondet.	Action to expropriate land.....	For the government.
The People of Porto Rico v. Clemencia Llanusa et al.	.....do.....	Do.
The People of Porto Rico v. Sucn. Cintrón Massary.	.....do.....	Do.
The People of Porto Rico v. Julio Capó Larrauri.	.....dq.....	Do.
The People of Porto Rico v. Camilla Zenovia Llanusa.	.....do.....	Do.
The People of Porto Rico v. Edgardo Vázquez et al.	Appeal from a decision of the Irrigation commission.	Judgment on agreement.
The People of Porto Rico v. A. Hartman & Co. et al.	.....do.....	Do.
The People of Porto Rico v. Suc. Juan Ignacio Capó et al.	.....do.....	For defendants.
The People of Porto Rico v. Ramón Morales Rodríguez.	Injunction.....	For the government.
The People of Porto Rico v. Carmen Delfi.	Action to expropriate land.....	Do.
<b>HUMACAO.</b>		
Fajardo Sugar Co. v. Treasurer of Porto Rico.	Recovery of taxes.....	Dismissed on motion of government. <sup>1</sup>
Diego Zalduendo Vele v. Treasurer of Porto Rico.	.....do.....	Do.
James Bliss Combs et al. v. Treasurer of Porto Rico.	.....do.....	Do.
Pilar Becarril v. Treasurer of Porto Rico.	.....do.....	Do.
<b>MAYAGUEZ.</b>		
The Commissioner of the Interior et al. v. Ramón Lagarde et al.	Injunction.....	For the government.
The People of Porto Rico v. Mateo Fajardo Cardona.	Action to recover taxes due on alcohol.	Defendant confessed judgment and paid \$9,800 to the government.
Do.....	.....do.....	Dismissed on appeal by stipulation.
Angel A. Vázquez v. Junta Escolar de Maricao.	Recovery of money.....	For the plaintiff.
The People of Porto Rico v. Joaquín Martínez et al.	.....do.....	Dismissed on motion of the government.
<b>PONCE.</b>		
The People of Porto Rico v. Laureano Cintrón.	Action to expropriate land.....	For the government.
Manuel de la Pila Iglesias et al. v. Executive Secretary.	Mandamus.....	Do. <sup>2</sup>
Sauri & Subirá v. Treasurer of Porto Rico.	Recovery of taxes.....	Do. <sup>3</sup>
Do.....	.....do.....	Do. <sup>3</sup>
<b>SAN JUAN.</b>		
<i>Section 1.</i>		
The People of Porto Rico v. Pedro E. Zamorano.	Action to recover real property..	For the government.
The People of Porto Rico v. Juan Fernandez Gómez.	.....do.....	Judgment by agreement.
The People of Porto Rico v. American Railroad Co. of Porto Rico.	Action for damage for injury to road roller.	Judgment for government for \$2,200 satisfied.
José Nater González v. The People of Porto Rico.	Dominion.....	For the government.
Fidel Arenas et al. v. Commissioner of the Interior.	Injunction.....	For the petitioner.
The fiscal of the district court, ex parte estate of H. V. Grosh.	Judicial administration.....	Pending.

<sup>1</sup> Appeal from the municipal court of Fajardo, May 10, 1918.<sup>2</sup> Appeal to the supreme court and judgment reversed within the fiscal year.<sup>3</sup> Appeal to the supreme court and judgment affirmed on July 18, 1918.

TABLE 22.—*Civil cases in which The People of Porto Rico had an interest and in which there have been decisions during the fiscal year—Continued.*

## DISTRICT COURTS OF PORTO RICO—Continued.

Title of action.	Nature thereof.	Judgment.
SAN JUAN—continued.		
Section 1—Continued.		
Ensenada Estates v. The Treasurer of Porto Rico.	Action to recover money paid under protest as taxes.	Demurrer to complaint sustained.
Do.....	do.....	Do.
Do.....	do.....	Do.
Do.....	do.....	Do.
Central Machete v. The Treasurer of Porto Rico.	do.....	Do.
Do.....	do.....	Do.
Fortuna Estates v. The Treasurer of Porto Rico.	do.....	Do.
Do.....	do.....	Do.
Do.....	do.....	Do.
Do.....	do.....	Do.
American Railroad Co. of Porto Rico v. Treasurer of Porto Rico.	do.....	Do.
Central Aguirre Co. v. Treasurer of Porto Rico.	do.....	Do.
James Bliss Combs et al. v. Treasurer of Porto Rico.	do.....	Do.
West India Oil Co. v. Treasurer of Porto Rico.	do.....	Do.
South Porto Rico Sugar Co. v. Treasurer of Porto Rico.	do.....	Do.
Russell & Co. v. Treasurer of Porto Rico.	do.....	Do.
Fajardo Sugar Co. v. Treasurer of Porto Rico.	do.....	Do.
Charles L. Crehore v. Treasurer of Porto Rico.	do.....	Do.
H. & S. Behn v. Treasurer of Porto Rico.	do.....	Do.
Rafael Fabian v. Treasurer of Porto Rico.	do.....	Do.
SAN JUAN.		
Section 2.		
School Board of Cidra v. Commissioner of the Interior.	Mandamus.....	Denied.
Emilia Arzán Torres v. Commissioner of Education.	do.....	Do.

## MUNICIPAL COURTS.

COAMO.		
The People of Porto Rico v. Agustín Pérez Pierret.	Recovery of taxes.....	For the government.
Do.....	do.....	Do.
FAJARDO.		
The Fajardo Sugar Growers Association v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	Complaint dismissed. <sup>1</sup>
Pilar Becerril v. Treasurer of Porto Rico.	do.....	Do.
James Bliss Combs et al. v. Treasurer of Porto Rico.	do.....	Do.
Diego Zaldoundo Veve v. Treasurer of Porto Rico.	do.....	Do.
SALINAS.		
Ex parte Félix Torres Bonilla.....	Possessory title proceedings.....	Dismissed.
SAN JUAN.		
The People of Porto Rico v. José Gonzáles Quiñones.	Recovery of money due to insane asylum.	Dismissed because of payment by defendant.
Freiria & Co. v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	Dismissed.

<sup>1</sup> Appeals to the district court of Humacao and dismissed.

TABLE 23.—*Civil cases in which The People of Porto Rico has an interest still in litigation at the close of the fiscal year.*

## CIRCUIT COURT OF APPEALS FOR THE FIRST CIRCUIT.

Title of action.	Nature thereof.	Commenced.	Status.
H. H. Scoville et al. v. The Commissioner of Health et al.	Injunction to restrain sale of land and building for Tuberculosis Sanatorium.	May 26, 1918	Pending.
The People of Porto Rico v. American Railroad Co. of Porto Rico.	Action to restrain an increase in freight rates, etc.	Sept. 11, 1917	Do.

## DISTRICT COURT OF THE UNITED STATES FOR PORTO RICO.

The People of Porto Rico v. Fortuna Estates.	Action to recover land....	May 19, 1917	Pending.
Fortuna Estates v. Henna et al. and the People of Porto Rico, intervenor.	Injunction to restrain taking of irrigation water.	Dec. 29, 1911	Decided against the government on July 16, 1918.
Compañía de los Ferrocarriles de Puerto Rico v. Treasurer of Porto Rico.	Injunction to restrain collection of taxes.	Feb. 6, 1918	Pending decision.
H. H. Scoville et al. v. Commissioner of Health et al.	Injunction to restrain sale of land and building for tuberculosis sanatorium.	Feb. 19, 1918	Case set for trial.
Porto Rican American Tobacco Co. et al. v. Treasurer of Porto Rico.	Injunction to restrain enforcement of stamp guarantee law.	Apr. 6, 1918	Pending.
West India & Panama Telegraph Co. et al. v. Public Service Commission.	Injunction to restrain enforcement of order of public service commission in re cable rate.	Apr. 8, 1918	Temporary injunction granted.

## SUPREME COURT OF PORTO RICO.

Fidel Arenas et al. v. The Commissioner of the Interior.	Injunction.....	Mar. 7, 1918	Pending decision.
Frederico Porrata Doria v. The People of Porto Rico.	Recovery of money.....	May 7, 1918	Do.
Fajardo Sugar Co. v. Treasurer of Porto Rico.	Recovery of taxes.....	Apr. 29, 1918	Pending hearing.
James Bliss Combs et al. v. Treasurer of Porto Rico.	.....do.....	.....do.....	Do.
H. and S. Behn v. Treasurer of Porto Rico.	.....do.....	.....do.....	Do.
Central Machete v. Treasurer of Porto Rico.	.....do.....	Mar. 28, 1918	Do.
Do.	.....do.....	.....do.....	Do.
Municipio de Quebradillas v. Executive Secretary.	Mandamus.....	.....do.....	Pending decision.
Sauri & Suhira v. Treasurer of Porto Rico.	Recovery of taxes.....	Dec. 3, 1917	Pending hearing.

## DISTRICT COURTS OF PORTO RICO.

ARECIBO.			
The People of Porto Rico v. Sucn. Tomás Boneta Bolet.	Recovery of land.....	June 12, 1916	Pending hearing.
The Fiscal of the District Court of Arecibo, in re Abintestado of Isaura Rodríguez Guerrero.	Judicial administration....	Nov. 5, 1917	Pending declaration of heirs.
GUAYAMA.			
The People of Porto Rico v. Sucn. C. J. Fantauzzi.	Action to expropriate land.	Oct. 15, 1917	Pending decision.
The People of Porto Rico v. Cecilia Alcáide de McCormick et al.	.....do.....	Dec. 21, 1917	Do.
The People of Porto Rico v. Enriqueta Díaz de Calimano.	.....do.....	June 25, 1918	Pending answer.
The People of Porto Rico v. Isidra Santos et al.	.....do.....	May 28, 1918	Pending hearing on defendant's demurrer.
Junta Escolar de Patillas v. Suc. Cervony Massary.	.....do.....	May 28, 1918	Do.

TABLE 23.—*Civil cases in which The People of Porto Rico has an interest still in litigation at the close of the fiscal year—Continued.*

## DISTRICT COURTS OF PORTO RICO—Continued.

Title of action.	Nature thereof.	Commenced.	Status.
<b>GUAYAMA—continued.</b>			
Enriqueta Díaz y Anes de Callimano v. Irrigation Commission.	Appeal from a decision of the irrigation commission.	Nov. 27, 1914	Pending hearing to dismiss.
A. Hartman & Co. v. Treasurer of Porto Rico.	Recovery of taxes.....	Nov. 26, 1917	Pending hearing on defendant's demurrer.
<b>HUMACAO.</b>			
Diego Zalduondo Veve v. Treasurer of Porto Rico.	Recovery of taxes.....	June 11, 1918	Pending hearing on defendant's demurrer.
Pilar Becerril v. Treasurer of Porto Rico.	.....do.....	.....do.....	Do.
James Bliss Combs et al. v. Treasurer of Porto Rico.	.....do.....	.....do.....	Do.
Fajardo Sugar Co. v. Treasurer of Porto Rico.	.....do.....	.....do.....	Do.
<b>MAYAGUEZ.</b>			
The People of Porto Rico v. Oscar F. Bravo.	Recovery of taxes.....	Sept. 23, 1914	Pending. <sup>1</sup>
Do.....	.....do.....	.....do.....	Do.
<b>PONCE.</b>			
The People of Porto Rico v. Juan Aquilino González.	Action to recover real property.	Nov. 2, 1911	Pending decision.
The People of Porto Rico v. Juan Martínez Domínguez.	Establishment of dominion title.	June 23, 1916	Pending.
The People of Porto Rico v. Suc. Ramón del Toro Seda.	Action to recover real property.	July 15, 1916	Do.
The People of Porto Rico v. Eleuteria Rivera Iritarray et al.	Action to cancel certain records in the registry of property.	Dec. 30, 1916	Do.
The People of Porto Rico v. Hector Santí.	Action to expropriate land.	Nov. 23, 1917	Do.
The People of Porto Rico v. Micaela Martínez Ortiz.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Fernando A. Vendrell.	.....do.....	Dec. 1, 1917	Do.
In re The People of Porto Rico v. Abintestato Rev. José María Sánchez.	Judicial administration...	July 10, 1917	Do.
The People of Porto Rico v. Hector Santí.	Action to expropriate land.	May 29, 1918	Do.
The People of Porto Rico In re Abintestato Francisco Dávila Rey.	Judicial administration...	Oct. 1, 1914	Do.
Saurí & Subirá v. Treasurer of Porto Rico.	Recovery of taxes.....	Sept. 30, 1916	Do.
Do.....	.....do.....	May 3, 1917	Do.
Bernardo Merle v. The People of Porto Rico.	Action to recover real property.	Apr. 8, 1918	Do.
<b>SAN JUAN.</b>			
<i>Section 1.</i>			
The People of Porto Rico v. Sobrinos de Ezquiaga.	Recovery of money.....	Jan. 31, 1916	Pending hearing.
The People of Porto Rico v. W. D. Noble et al.	.....do.....	May 12, 1908	Pending decision.
A. Blanco Fernandez v. Treasurer of Porto Rico.	Injunction.....	Dec. 21, 1908	Pending hearing.
The People of Porto Rico v. Ancieto Miranda.	Action to recover real property.	Dec. 23, 1911	Pending decision.
The People of Porto Rico v. J. E. Igúina et al.	Nullity of proceedings.....	June 4, 1917	Pending hearing on defendant's demurrer.
The Porto Rico Telephone Co. v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	Mar. 20, 1916	Pending hearing.
B. Fernandez Hnos. Suc. v. Treasurer of Porto Rico.	.....do.....	Aug. 1, 1917	Do.
The People of Porto Rico v. A. Antomattei et al.	Appeal from a decision of the irrigation commission.	Sept. 26, 1918	Pending to file briefs.

<sup>1</sup> Motion to dismiss filed July 8, 1918.



TABLE 23.—*Civil cases in which The People of Porto Rico has an interest still in litigation at the close of the fiscal year—Continued.*

## DISTRICT COURTS OF PORTO RICO—Continued.

Title of action.	Nature thereof.	Commenced.	Status.
<b>SAN JUAN—continued.</b>			
<i>Section 1—Continued.</i>			
The People of Porto Rico v. Eulalia S. de Barbosa et al.	Appeal from a decision of the irrigation commission.	Sept. 26, 1918	Pending to file briefs.
The People of Porto Rico v. A. Pérez González et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Patricio Alvarado et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Andrés Cruz et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Adolfo Anselmi et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Logia Iris de Paz et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Cristino Muñoz et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Pablo Antomattai et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Domingo Torres et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Jorge Torres et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Fernando Vendrell et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Enriqueta Iraz de Callimano et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. Susa. de C. J. Fantauzzi et al.	.....do.....	.....do.....	Do.
Do.....	.....do.....	.....do.....	Do.
Do.....	.....do.....	.....do.....	Do.
The People of Porto Rico v. María Franceschi et al.	.....do.....	.....do.....	Do.
The People of Porto Rico v. A. Hartman & Co. et al.	.....do.....	.....do.....	Do.
Do.....	.....do.....	.....do.....	Do.
The People of Porto Rico v. W. L. Crahore et al.	.....do.....	.....do.....	For the government.
Do.....	.....do.....	.....do.....	Pending decision.
The People of Porto Rico v. The Irrigation Commission.	.....do.....	.....do.....	For the government.
Do.....	.....do.....	.....do.....	Pending to file briefs.
Do.....	.....do.....	.....do.....	Do.
Rosario Claiden v. Irrigation Commission and the People.	.....do.....	.....do.....	Dismissed.
Fernando A. Vendrell v. Irrigation Commission and the People.	.....do.....	Sept. 28, 1918	Pending to file briefs.
Ex parte Russell & Co.....	.....do.....	.....do.....	Pending decision.
Porto Rico Coal Co. v. The People of Porto Rico.	Recovery of money.....	Sept. 27, 1917	At issue.
The People of Porto Rico v. Suc. de R. Valdés.	Action to recover real property.	May 12, 1914	Pending to file briefs.
Susa. de C. J. Fantauzzi v. Treasurer of Porto Rico.	Action to recover money paid under protest as taxes.	Oct. 27, 1917	Pending answer.
Do.....	.....do.....	.....do.....	Do.
Do.....	.....do.....	Mar. 25, 1918	Pending hearing on defendant's demurrer.
Do.....	.....do.....	.....do.....	Do.
The People of Porto Rico v. Suc. L. Villamil.	Recovery of money.....	Nov. 9, 1917	Pending hearing on motion to strike.
The People of Porto Rico v. C. López Pérez.	Injunction.....	Dec. 12, 1917	Pending decision.
Freiria & Co. v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	Mar. 1, 1918	Pending hearing on motion to quash summons.
The People of Porto Rico v. Isaac Sacks.	Recovery of money.....	Mar. 5, 1918	Pending answer.
José Salgado Jimenez v. The People of Porto Rico.	Damages.....	Apr. 14, 1918	Pending hearing on defendant's demurrer.
O. L. Crahore v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	May 7, 1918	Pending.
Central Aguirre v. Treasurer of Porto Rico.	.....do.....	.....do.....	Do.
Russell and Co. v. Treasurer of Porto Rico.	.....do.....	June 7, 1918	Pending hearing on defendant's demurrer.

TABLE 23.—*Civil cases in which The People of Porto Rico has an interest still in litigation at the close of the fiscal year—Continued.*

## DISTRICT COURTS OF PORTO RICO—Continued.

Title of action.	Nature thereof.	Commenced.	Status.
<b>SAN JUAN—continued.</b>			
<b>Section 1—Continued.</b>			
South Porto Rico Sugar Co. v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	June 7, 1918	Pending hearing on defendant's demurrer.
Fajardo Sugar Co. v. Treasurer of Porto Rico.	.....do.....	June 11, 1918	Do.
H. & S. Behn v. Treasurer of Porto Rico.	.....do.....	June 14, 1918	Pending.
Ex parte American Railroad Co. of Porto Rico.	Appeal from a decision of the Public Service Commission.	June 18, 1918	Pending answer.
Peter Merrey.....	Appeal from a decision of the Workman's relief Commission.	June 24, 1918	Do.
<b>SAN JUAN.</b>			
<b>Section 2.</b>			
The People of Porto Rico v. Sobrinos de Esquilaga.	Action to compel forfeiture of distillery bond.	Jan. 30, 1906	Pending hearing.
The People of Porto Rico v. W. D. Noble et al.	Action to recover on ball bond.	May 12, 1908	Pending decision. <sup>1</sup>

## MUNICIPAL COURTS.

<b>FAJARDO.</b>			
The Fajardo Sugar Growers Association v. Municipal Treasurer of Fajardo.	Recovery of taxes.....	Aug. 13, 1917	Pending hearing on defendant's demurrer.
<b>SALINAS.</b>			
The People of Porto Rico v. Luis Colon Delfi et al.	Recovery of money.....	June 25, 1918	Pending to serve summons. <sup>2</sup>
<b>SAN JUAN.</b>			
The Domestic & Foreign Missions of the Protestant Episcopal Church v. Treasurer of Porto Rico.	Recovery of money paid under protest as taxes.	Mar. 28, 1914	At issue.
<b>YABUCOA.</b>			
The People of Porto Rico v. Emilio Colón y Gregorio Berrios.	Recovery of money.....	July 7, 1915	Pending hearing on defendant Berrios' demurrer.

<sup>1</sup> Decided after end of fiscal year. Judgment for government.<sup>2</sup> Summons served on July 2, 1918.

TABLE 24.—Statement showing the number of prisoners and number of sick in the penal institutions and inmates in the reform school, fiscal year 1917-18.

Prisoners.	Peni- ten- tiary.	San Juan jail.	Are- cibo jail. <sup>1</sup>	Agua- dilla jail.	Maya- guez jail.	Ponce jail.	Gua- yama jail.	Huma- cao jail.	Re- form school.	Total.
Prisoners confined on June 30, 1917.....	502	310	.....	102	74	116	68	133	99	1,404
Prisoners entered during the fiscal year 1917-18.....	493	1,562	833	466	788	784	582	766	137	6,184
Total.....	795	1,872	833	568	832	900	650	902	236	7,588
Prisoners discharged during fiscal year 1917-18.....	330	1,676	723	505	756	822	579	771	40	6,202
Prisoners confined on June 30, 1918.....	465	196	110	63	76	78	71	131	196	1,336
Sick prisoners on June 30, 1917.....	86	32	.....	4	2	6	7	7	.....	144
Sick during the fiscal year 1917-18.....	268	239	132	71	87	198	83	94	270	1,522
Total.....	434	271	132	75	89	204	90	101	270	1,666
Sick cured during fiscal year 1917-18.....	351	252	128	68	86	200	86	92	268	1,531
Balance.....	83	19	4	7	3	4	4	9	2	125
Deaths during the fiscal year 1917-18 <sup>2</sup> .....	19	1	2	2	2	1	1	2	2	32
Sick prisoners on June 30, 1918.....	64	18	2	5	1	3	3	7	.....	103

<sup>1</sup> No figures are given to this jail on June 30, 1917, since up to that date the San Juan and Arecibo jails were running as a single jail.

<sup>2</sup> One by execution.

TABLE 25.—Statement showing terms of sentence of prisoners confined in the penal institutions and inmates in the reform school on June 30, 1918.

Prisoners.	Peni- ten- tiary.	San Juan jail.	Are- cibo jail.	Agua- dilla jail.	Maya- guez jail.	Ponce jail.	Gua- yama jail.	Huma- cao jail.	Re- form school.	Total.
Awaiting trial.....	.....	23	3	2	3	8	3	5	.....	47
Sentenced.....	465	173	107	61	73	70	68	126	196	1,339
Total.....	465	196	110	63	76	78	71	131	196	1,336
Sentenced to serve until 21 years of age.....	.....	113	.....	.....	.....	.....	.....	.....	195	208
Up to 6 months.....	6	112	65	48	39	38	48	59	.....	415
Over 6 months and less than 1 year.....	3	17	8	3	5	11	6	8	.....	61
1 year and less than 2.....	82	31	25	7	25	21	9	32	.....	232
2 years and less than 3.....	41	.....	3	3	4	.....	4	8	1	64
3 years and less than 4.....	38	.....	.....	.....	.....	.....	1	5	.....	44
4 years and less than 5.....	6	.....	1	.....	.....	.....	.....	.....	.....	7
5 years and less than 6.....	54	.....	3	.....	.....	.....	.....	5	.....	62
6 years and less than 7.....	28	.....	.....	.....	.....	.....	.....	1	.....	39
8 years and less than 10.....	28	.....	.....	.....	.....	.....	.....	.....	.....	28
10 years and less than 15.....	94	.....	1	.....	.....	.....	.....	5	.....	100
15 years and less than 20.....	9	.....	1	.....	.....	.....	.....	2	.....	12
20 years and less than 30.....	22	.....	.....	.....	.....	.....	.....	1	.....	23
30 years and over.....	4	.....	.....	.....	.....	.....	.....	.....	.....	4
Lifetime.....	37	.....	.....	.....	.....	.....	.....	.....	.....	37
Condemned to death.....	3	.....	.....	.....	.....	.....	.....	.....	.....	3
Total.....	465	173	107	61	73	70	68	126	196	1,339

<sup>1</sup> In the children ward of San Juan jail, pending transfer to reform school.

TABLE 26.—*Number of commitments of prisoners in the penal institutions and inmates in the reform school on June 30, 1918.*

Expression.	Penitentiary.	District jails.	Reform school.	Total.
Confined for the—				
First time.....	331	364	123	818
Second time.....	55	145	72	272
Third time.....	26	77	1	104
Fourth time.....	20	33		53
Fifth time.....	10	21		31
Sixth time.....	8	16		24
Seventh time.....	9	17		26
Eighth time.....	3	9		12
Ninth time.....	1	12		13
Tenth time.....	1	6		7
Eleventh time.....	1	6		7
Twelfth time.....		6		6
Thirteenth time.....		3		3
Fourteenth time.....		3		3
Fifteenth time.....		3		3
Sixteenth time.....		2		2
Seventeenth time.....		2		2
Total.....	465	725	196	1,386

TABLE 27.—*Classification, by age, of number of prisoners when convicted, in the penal institutions and inmates in the reform school, on June 30, 1918.*

Expression.	Penitentiary.	District jails.	Reform school.	Total.
Up to 10 years.....			11	11
11 years and under 16 years.....		19	185	204
16 years and under 21 years.....	65	167		232
21 years and under 25 years.....	132	242		374
25 years and under 30 years.....	123	131		254
30 years and under 35 years.....	52	74		126
35 years and under 40 years.....	37	35		72
40 years and under 45 years.....	25	22		47
45 years and under 50 years.....	14	13		27
50 years and under 55 years.....	6	15		21
55 years and under 60 years.....	2	6		8
60 years and under 65 years.....	5			5
65 years and under 70 years.....	1			1
70 years and under 75 years.....	1	1		2
75 years and under 80 years.....	1			1
80 years and upward.....	1			1
Total.....	465	725	196	1,386

TABLE 28.—*Grand total of prisoners on June 30, 1918.*

Expression.	Penitentiary.	San Juan jail.	Arecibo jail.	Agua-dilla jail.	Mayaguez jail.	Ponce jail.	Guayama jail.	Humacao jail.	Reform school.	Total.
Confined in the penal institutions and reform school.....	465	196	110	63	76	78	71	131	196	1,386
Paroled.....	63									63
Fugitives.....	36	37		7	7	28	12	16		143
Total.....	564	233	110	70	83	106	83	147	196	1,592

TABLE 29.—*Classification, by nationality, of prisoners confined in the penal institutions and inmates in the reform school on June 30, 1918.*

Expression.	Penitentiary.	District jails.	Reform school.	Total.
Natives of the United States of America.....	1	1		2
Natives of Porto Rico.....	464	723	193	1,381
Spaniards.....			1	1
Dominicans.....		1	2	3
Total.....	465	725	196	1,386

TABLE 30.—*Different classifications of prisoners confined in the penal institutions and inmates in the reform school on June 30, 1918.*

Expression	Peniten- tiary.	District jails.	Reform school.	Total.
<b>Sex:</b>				
Male.....	465	685	196	1,346
Female.....		40		40
Total.....	465	725	196	1,386
<b>Conjugal relations:</b>				
Single.....	265	569	196	1,030
Married.....	154	148		302
Widowed.....	16	8		24
Total.....	465	725	196	1,386
<b>Color:</b>				
White.....	220	327	93	640
Mulatto.....	140	307	76	523
Negro.....	105	91	27	223
Total.....	465	725	196	1,386
<b>Education:</b>				
Know how to read.....	64	59		123
Know how to read and write.....	197	224	130	551
Do not know how to read and write.....	204	442	66	712
Total.....	465	725	196	1,386
Attended colleges.....	4	3		7
Attended common schools.....	193	367	111	671
No education.....	268	355	85	708
Total.....	465	725	196	1,386
<b>Religious preference:</b>				
Catholics.....	365	550	135	1,050
Protestants.....	50	72	47	169
Spiritualists.....	48	50	11	109
Creedless.....	2	53	3	58
Total.....	465	725	196	1,386
<b>Habits:</b>				
Used liquors.....	53	198	79	330
Did not use liquors.....	412	527	117	1,056
Total.....	465	725	196	1,386
Used tobacco.....	449	564	72	1,085
Did not use tobacco.....	16	161	124	301
Total.....	465	725	196	1,386
<b>Employed or idle:</b>				
Employed when crime was committed.....	429	553	16	998
Idle when crime was committed.....	36	172	180	388
Total.....	465	725	196	1,386
<b>Behavior in the penal institution:</b>				
Good.....	344	678	110	1,132
Fair.....	16	7	78	101
Bad.....	105	40	8	153
Total.....	465	725	196	1,386
<b>Physical condition on commitment:</b>				
Good health.....	455	678	187	1,320
Sick.....	10	47	9	66
Total.....	465	725	196	1,386

TABLE 31.—Statement showing occupations of prisoners when convicted and confined in the penal institutions and inmates in the reform school on June 30, 1918.

Expression.	Peniten- tary.	District jails.	Reform school.	Total.
Artists.....	1	1		2
Barbers.....	4	10		14
Bakers.....	4	9		13
Butchers.....	1	3		4
Blacksmiths.....	1	3		4
Bootblack.....		1		1
Cigarmakers.....	12	22		34
Carpenters.....	9	22	30	61
Coopers.....				
Cocoh drivers.....	1	4		5
Clerks.....		6		6
Cooks.....	4	1		5
Chauffeurs.....		5		5
Domestic employees.....		47		47
Employees.....	10	15		25
Electricians.....	1	5		6
Hatters.....		1		1
Laborers.....	250	444		694
Longshoremen.....		1		1
Merchants.....	4	6		10
Masons.....	2	4		6
Mechanicians.....	1	6		7
Motormen.....				
Property owners.....	28	2		30
Planters.....	12	18	50	80
Printers.....	1	1		2
Painters.....	2	7		9
Plumbers.....	1	6		7
Physicians.....		1		1
Servants.....	2	2		4
Students.....			55	55
Soldiers.....				
Shoemakers.....	14	17	39	70
Stonecutter.....		1		1
Silversmiths.....				
Sailors.....	1	8		9
Shoemakers.....	3			3
Tradesmen.....	42	41		83
Tailors.....	16	2	22	40
Tinsmiths.....	1	1		2
Watchmakers.....	1			1
Without occupation.....	36	2		38
Total.....	465	725	196	1,386

TABLE 32.—*Summary of offenses on June 30, 1918.*

	Number of offenses.	Percentage of total number of offenses.	Rate per thousand on island's population.
Larceny (grand, 41; petit, 346).....	387	27.92	0.3461
Delinquent minors.....	177	12.77	.1593
Burglary.....	172	12.40	.1638
Assault and battery.....	130	9.37	.1162
Murder.....	101	7.28	.0903
Homicide.....	67	4.68	.0602
Rape.....	49	3.60	.0438
Attempt to kill.....	32	2.30	.0286
Embezzlement.....	27	1.94	.0241
False impersonation and imposture.....	27	1.95	.0241
Breach of public peace.....	25	1.80	.0223
Mayhem.....	20	1.44	.0178
Gambling.....	12	.86	.0107
Against the public justice.....	10	.72	.0089
Attempt to commit homicide.....	10	.72	.0089
Attempt to commit rape.....	10	.72	.0089
Incest.....	9	.64	.0080
Abandonment and desertion of minors.....	8	.57	.0072
Concealed weapons.....	7	.50	.0062
Against nature.....	6	.43	.0053
Violation of Federal acts of United States of America.....	6	.43	.0053
Arson.....	6	.43	.0053
Violation sections 84, 149, 155, 160, 163, Penal Code.....	6	.43	.0053
Attempt to commit burglary.....	5	.36	.0044
Forgery.....	4	.28	.0035
Fraud.....	4	.28	.0035
Violation sections 125, 282, 283, 290, Penal Code.....	4	.28	.0035
Keeping disorderly house.....	4	.28	.0035
Robbery.....	4	.28	.0035
Seduction.....	4	.28	.0035
Obscene abuse.....	3	.21	.0026
Conspiracy.....	3	.21	.0026
Against the executive power.....	3	.21	.0026
Violation of postal law.....	3	.21	.0026
Against the public health.....	2	.14	.0017
Against property.....	2	.14	.0017
Dishonest exhibitions.....	2	.14	.0017
Violation of municipal ordinances.....	2	.14	.0017
Other offenses.....	33	2.38	.0296
Total.....	1,386		

TABLE 33.—*Classification of prisoners in the penal institutions and inmates in the reform school, by judicial districts, on June 30, 1918, and percentage in relation to the total population of Porto Rico.*

	Peniten- tiary.	District jails.	Reform school.	Total.	Percent- age.	Popula- tion.
Judicial district of—						
Aguadilla.....	43	76	21	140	0.1252	136,780
Arecibo.....	61	116	15	192	.1717	173,335
Guayama.....	73	74	15	162	.1449	153,344
Humacao.....	87	130	18	235	.2101	124,332
Mayaguez.....	44	52	19	115	.1028	113,896
Ponce.....	68	74	64	206	.1842	195,561
San Juan.....	89	203	43	335	.2996	220,774
United States district court.....			1	1	.0009	
Total.....	465	725	196	1,386	1.2394	1,118,012

TABLE 34.—Principal offenses for which prisoners have been sentenced, by calendar year, on and after 1887.

Years.	Against person.				Against property.				Against morals.		
	Murder.	Homicide.	Attempt to kill.	Total.	Arson.	Robbery.	Burglary.	Total.	Rape.	Seduction.	Total.
1887	1	21	5	27	3	68	.....	71	8	.....	8
1888	.....	19	9	28	18	18	.....	18	.....	.....	.....
1889	.....	20	12	32	3	3	.....	3	.....	.....	.....
1890	1	31	3	35	28	28	.....	28	1	.....	1
1891	2	40	5	47	4	122	.....	126	6	.....	6
1892	.....	36	.....	36	9	61	.....	70	4	.....	4
1893	.....	32	2	34	1	56	.....	57	5	.....	5
1894	.....	33	4	37	109	.....	.....	109	4	.....	4
1895	.....	16	4	20	2	113	.....	115	4	.....	4
1896	2	22	4	28	.....	88	.....	88	.....	.....	.....
1897	3	34	6	43	2	48	.....	50	.....	.....	.....
1898	2	22	1	25	8	8	.....	8	.....	.....	.....
1899	5	21	6	32	8	74	.....	82	1	.....	1
1900	8	28	17	53	3	117	.....	120	3	.....	3
1901	3	25	13	41	3	79	.....	82	5	.....	5
1902	5	21	7	33	2	50	5	57	7	5	12
1903	9	30	7	46	3	14	32	49	7	3	10
1904	9	25	3	37	1	8	20	29	9	7	16
1905	25	15	14	54	.....	2	58	60	20	17	37
1906	16	21	15	52	.....	1	82	83	16	13	29
1907	9	19	19	47	.....	3	90	93	18	9	27
1908	9	20	6	35	1	4	96	101	11	9	20
1909	5	17	15	37	4	4	129	137	6	12	18
1910	12	48	6	66	2	2	141	145	10	3	13
1911	17	22	12	51	2	.....	32	34	6	2	8
1912	10	33	5	48	.....	1	69	72	9	2	11
1913	8	21	5	34	.....	1	74	75	4	1	5
1914	12	15	10	37	.....	.....	43	43	11	3	14
1915	6	22	5	33	.....	.....	72	73	16	1	17
1916	25	45	10	80	2	.....	121	123	9	2	11
1917	17	16	10	43	2	.....	56	58	9	3	11
1918	8	9	15	32	.....	.....	46	46	4	2	6

1 From Jan. 1 to June 30.

TABLE 35.—Average number of prisoners in the penal institutions and inmates in the reform school.

	Penitentiary.	San Juan jail.	Arecibo jail. <sup>1</sup>	Agua-dilla jail.	Mayaguez jail.	Ponce jail.	Gua-yama jail.	Huma-cao jail.	Re-form school.	Total.
Daily average number of prisoners:										
1905-6	591	507	.....	77	105	299	118	158	.....	1,855
1906-7	668	368	.....	61	105	215	130	146	.....	1,693
1907-8	646	355	.....	50	137	181	105	192	26	1,692
1908-9	559	360	.....	67	117	199	104	204	44	1,654
1909-10	530	309	.....	73	122	175	99	213	71	1,592
1910-11	546	336	.....	49	96	270	112	143	89	1,641
1911-12	501	354	.....	43	110	309	128	138	98	1,681
1912-13	486	336	.....	53	102	162	158	133	96	1,526
1913-14	437	350	.....	85	122	151	132	168	100	1,545
1914-15	413	351	.....	78	113	159	95	180	98	1,487
1915-16	481	375	.....	65	129	163	83	163	100	1,559
1916-17	463	341	.....	72	75	147	91	144	100	1,433
1917-18	456	206	111.50	63.34	75.55	101.84	95.32	143	156.81	1,406.36
Daily average number of sick prisoners on special rations:										
1905-6	76	27	.....	3	11	18	3	20	.....	158
1906-7	73	10	.....	1	2	14	4	17	.....	131
1907-8	70	13	.....	1	10	17	8	17	2	138
1908-9	58	11	.....	1	13	16	8	10	1	118
1909-10	54	9	.....	1	4	15	4	10	3	100
1910-11	50	13	.....	2	4	13	4	5	3	94
1911-12	70	21	.....	2	6	10	5	5	5	124
1912-13	74	23	.....	1	6	7	8	7	5	131
1913-14	70	30	.....	1	11	4	7	7	2	132
1914-15	63	29	.....	1	9	6	6	10	2	126
1915-16	76	30	.....	5	3	6	6	14	2	142
1916-17	60	30.39	.....	4.41	0.65	7.29	10.60	13.46	1.18	127.96
1917-18	59.98	18.25	8.72	3.14	1.25	1.49	6.55	9.33	1.29	110

<sup>1</sup> No figures are given for the Arecibo jail up to the fiscal year 1916-17, since the San Juan and Arecibo jails were running as a single jail until June 30, 1917.



TABLE 36.—*Number of prisoners in the penal institutions and inmates in the reform school on June 30, 1918, from the different cities of Porto Rico.*

Expression.	Peniten- tiary.	District jails.	Reform school.	Total.
Adjuntas.....	2	8		10
Aguada.....	4	6	1	11
Aguadilla.....	15	39	12	66
Aguas Buenas.....	4			4
Albonito.....	7	1		8
Anasco.....	6	4	2	12
Arecibo.....	23	60	12	95
Arroyo.....	3	2	2	7
Barceloneta.....	1	4		5
Barranquitas.....	1			1
Barros.....	2	1	2	5
Bayamon.....	14	32	6	51
Cabo Rojo.....	6	3	3	12
Caguas.....	15	52	2	69
Camuy.....	5	8		13
Carolina.....	7	13		20
Cavey.....	14	11	5	30
Celba.....	2	1	1	4
Ciales.....	2	7		9
Cidra.....	2		1	3
Coamo.....	4	1		5
Comerio.....	6		2	8
Corozal.....	1			1
Culebras.....	2			2
Dorado.....		12	5	17
Fajardo.....	12			12
Gurabo.....	2			2
Guayama.....	24	40	4	68
Guayanilla.....	6			6
Guanica.....	2	8	2	12
Gurabo.....	1			1
Hatillo.....	1			1
Hormigueros.....	1	1		2
Humacao.....	12	30	2	44
Isabela.....	3	5	3	11
Jayuya.....	1			1
Juana Diaz.....	6	3		9
Juncos.....	10	1	1	12
Lajas.....	1		1	2
Lares.....	9	6	2	17
Las Marias.....	2	1		3
Las Piedras.....	5			5
Loiza.....	3	2		5
Iuquillo.....	4	1	1	6
Manati.....	11	13	1	25
Maricao.....	3	1		4
Maunabo.....	4	3		7
Mayaguez.....	20	43	11	74
Moca.....	7			7
Morovis.....	1	1		2
Naguabo.....	1		1	2
Naranjito.....				
Patillas.....	5	8		13
Penuelas.....	3			3
Ponce.....	34	59	53	146
Quebradillas.....	4	4	1	9
Rincon.....	6	1	3	10
Rio Grande.....	3	7		10
Rio Piedras.....	4	15	2	21
Sabana Grande.....	2		1	3
Salinas.....	10	9	8	27
San German.....	2	6		8
San Juan.....	41	134	36	211
San Lorenzo.....	5	10	1	16
San Sebastian.....	3	12	1	16
Santa Isabel.....	5	2		7
Toa Alta.....	2	2		4
Toa Baja.....	3			3
Trujillo Alto.....				
Utusado.....	10	15	1	26
Vega Alta.....	1			1
Vega Baja.....		7	1	8
Vieques.....	10	3		13
Villalba.....				
Yabucoa.....	9	6	4	19
Yauco.....	5	3	4	12
Total.....	465	705	196	1,366

TABLE 37.—*Number of days' work performed by prisoners employed on the insular highways during the fiscal year 1917-18.*

Month.	Penitentiary.	San Juan jail.	Arecibo jail.	Agua-dilla jail.	Mayaguez jail.	Ponce jail.	Guayama jail.	Humacao jail.	Total.
<b>1917.</b>									
July.....	5,673	269	130	662	235	.....	.....	1,187	7,556
August.....	5,465	210	344	641	418	440	467	1,047	9,062
September.....	4,857	333	248	553	395	447	1,706	1,685	10,233
October.....	5,761	1,191	301	511	273	921	2,744	1,956	13,598
November.....	9,380	2,257	675	447	283	1,274	2,210	2,146	18,672
December.....	8,966	1,495	680	353	394	1,235	1,508	2,030	16,661
<b>1918.</b>									
January.....	5,567	923	778	508	417	1,218	1,284	1,957	12,652
February.....	4,462	271	578	491	285	1,128	639	2,058	9,913
March.....	4,714	161	185	493	374	612	.....	1,616	8,155
April.....	4,288	54	10	180	801	260	.....	1,858	7,451
May.....	4,054	219	.....	315	1,091	260	353	1,974	8,206
June.....	2,780	25	.....	364	1,042	399	300	1,566	6,476
Total.....	65,347	7,408	3,929	5,517	6,009	8,194	11,211	21,080	128,695

TABLE 38.—*Number of days' work performed by prisoners of the penitentiary and district jails in the cleaning of Government offices and moving of office furniture, etc., during fiscal year 1917-18.*

	Governor's palace.	Office of the attorney general.	Department of—					Executive secretary.	Office of the auditor.	Insular police.	Municipalities.	Courts.	Total.
			Edu-cation.	Interior.	Agriculture and labor.	Sanitation.	Treas-ury.						
1917.													
July.....	435	17	95	210	69	784	38	104	5	893	.....	382	3,062
August.....	412	5	98	257	85	1,275	84	97	.....	918	3	503	3,737
September.....	408	7	97	250	80	842	54	73	.....	718	.....	455	2,984
October.....	383	24	99	258	72	877	64	82	9	647	.....	426	2,941
November.....	406	15	98	243	83	619	44	71	.....	627	1	462	2,669
December...	442	2	89	200	81	745	51	55	.....	742	369	462	3,238
1918.													
January.....	425	38	80	210	97	714	4	72	16	776	46	419	2,897
February.....	387	.....	78	224	69	867	10	56	.....	772	53	495	3,041
March.....	416	.....	99	213	72	709	24	88	8	860	43	519	3,061
April.....	411	24	85	249	102	943	63	78	.....	899	55	565	3,514
May.....	426	7	37	411	61	1,163	38	92	.....	620	71	494	3,470
June.....	420	6	68	455	112	912	75	77	4	692	784	397	4,002
Total..	4,971	145	1,073	3,180	983	10,350	609	945	42	9,074	1,455	5,609	28,436

TABLE 39.—*Table showing the ages of the children brought before the juvenile courts.*

Juvenile court of—	Total number of cases.	Years—												Un known.	Over 16 years of age.
		15	14	13	12	11	10	9	8	7	6	5	4		
Agua-dilla.....	40	8	5	2	1	5	4	1	3	.....	.....	.....	.....	1	.....
Arecibo.....	49	10	16	3	8	3	6	1	1	1	.....	.....	.....	.....	.....
Guayama.....	27	5	6	4	4	1	2	.....	.....	.....	.....	.....	.....	5	.....
Humacao.....	30	7	5	9	3	.....	.....	2	.....	.....	.....	.....	.....	3	.....
Mayaguez.....	22	3	4	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ponce.....	104	26	23	8	19	0	8	4	4	.....	.....	.....	2	.....	.....
San Juan.....	190	35	17	24	32	15	10	5	8	.....	2	2	.....	39	.....
Total.....	452	94	76	54	71	37	30	13	16	1	2	2	2	48	6

TABLE 40.—Table showing the school attendance and education of the children brought before the juvenile courts.

Juvenile court of—	Never attended school.	School grade reached.								
		1	2	3	4	5	6	7	8	9
Aguadilla.....	15	6	3	2	1	1	1	1	.....	.....
Arecibo.....	27	4	6	5	5	.....	2	.....	.....	.....
Guayama.....	15	1	3	2	1	2	3	.....	.....	.....
Humacao.....	5	7	9	1	4	.....	2	1	.....	1
Mayaguez.....	10	4	3	.....	3	1	1	.....	.....	.....
Ponce.....	32	18	20	17	11	2	4	.....	.....	.....
San Juan.....	148	13	14	3	9	3	.....	.....	.....	.....
Total.....	252	53	58	30	34	9	13	2	.....	1

TABLE 41.—Table showing the legitimacy of the children brought before the juvenile courts.

Juvenile court of—	Legitimate.	Recognized.	Illegitimate.	Unknown.
Aguadilla.....	19	1	10	.....
Arecibo.....	30	10	9	.....
Guayama.....	15	.....	10	.....
Humacao.....	15	3	11	1
Mayaguez.....	6	7	9	.....
Ponce.....	57	4	35	8
San Juan.....	128	.....	49	13
Total.....	270	25	133	24

TABLE 42.—Table showing the color of the children brought before the juvenile courts.

Juvenile court of—	White.	Mulatto.	Black.	Unknown.
Aguadilla.....	21	6	3	.....
Arecibo.....	24	16	6	3
Guayama.....	13	11	1	2
Humacao.....	12	12	6	.....
Mayaguez.....	12	6	4	.....
Ponce.....	40	34	18	12
San Juan.....	35	18	11	126
Total.....	157	103	49	143

TABLE 43.—Table showing the persons with whom the children lived when they were brought before the juvenile courts.

Juvenile court of—	Mother alone.	Father alone.	Both parents.	Brother or sister.	Relative.	Friend.	Homeless.	Unknown.
Aguadilla.....	12	6	5	1	2	2	2	.....
Arecibo.....	20	21	.....	4	3	.....	1	.....
Guayama.....	6	5	.....	2	4	2	3	5
Humacao.....	14	4	1	1	5	4	1	.....
Mayaguez.....	5	3	2	.....	7	1	4	.....
Ponce.....	50	23	4	2	6	7	7	5
San Juan.....	44	31	4	2	10	37	59	3
Total.....	151	93	16	12	37	53	77	13

TABLE 44.—Table showing the persons who presented petitions alleging that the children were delinquent or abandoned before the juvenile courts.

Juvenile court of—	Probation officer.	Police.	Mother.	Father.	Relative.	Guardian.	Private parties.	Complainants.
Aguadilla.....	9	16	.....	.....	1	.....	3	1
Arecibo.....	4	42	.....	.....	1	.....	.....	2
Guayama.....	1	27	.....	.....	.....	.....	.....	.....
Humacao.....	1	27	.....	1	.....	.....	.....	.....
Mayaguez.....	1	17	.....	.....	2	.....	2	2
Ponce.....	55	46	2	.....	.....	2	.....	1
San Juan.....	10	135	4	2	1	.....	26	8
Total.....	80	310	6	3	5	2	32	14

TABLE 45.—Table showing the crimes imputed or committed by the children brought before the juvenile courts.

Juvenile court of—	Larceny.	Assault and battery.	Breach of the peace.	Burglary.	Perjury.	Gambling.	Embezzlement.	Malicious damages.	False representation.	Violation sec. 44a, Penal Code.	Infraction automobile law.	Infraction municipal ordinance.	Abandoned.	Immoral actions.
Aguadilla.....	16	4	.....	2	1	2	1	1	1	.....	.....	.....	2	.....
Arecibo.....	29	6	3	3	.....	4	.....	.....	.....	3	.....	.....	3	.....
Guayama.....	16	7	.....	1	.....	.....	2	.....	.....	.....	.....	.....	1	.....
Humacao.....	15	6	1	4	.....	.....	.....	.....	1	.....	1	.....	2	.....
Mayaguez.....	17	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ponce.....	70	10	2	4	.....	1	4	1	3	.....	.....	.....	5	1
San Juan.....	69	25	10	5	.....	4	5	2	.....	.....	29	46	4	.....
Total.....	232	61	17	20	1	11	12	4	5	3	1	32	59	5

TABLE 46.—Resolutions of the juvenile courts.

Juvenile court of—	Delinquents.	Abandoned.	Not guilty or filed.	Pending.
Aguadilla.....	21	5	3	1
Arecibo.....	17	1	31	.....
Guayama.....	16	1	9	.....
Humacao.....	17	2	11	.....
Mayaguez.....	19	.....	3	.....
Ponce.....	64	7	31	3
San Juan.....	126	40	22	2
Total.....	280	56	110	6

TABLE 47.—Table showing the persons in whose charge the children were placed by the juvenile courts.

Juvenile court of—	Reform school.	Charity school.	Parents.	Father.	Mother.	Relative.	Friend.	Guardian.	Not guilty or filed.	Pending.
Aguadilla.....	11	4	.....	8	1	3	.....	.....	2	1
Arecibo.....	14	1	2	15	8	5	1	.....	3	.....
Guayama.....	12	1	.....	6	1	3	3	.....	1	.....
Humacao.....	13	2	1	2	7	2	.....	.....	3	.....
Mayaguez.....	11	.....	.....	3	3	3	.....	.....	2	.....
Ponce.....	28	4	1	11	18	5	3	1	31	3
San Juan.....	45	21	3	27	41	19	13	2	16	2
Total.....	134	33	7	72	79	40	20	3	58	6

TABLE 48.—*Change in the personnel of officers of the department of justice during fiscal year 1917-18.*

Name.	Office.	Appointment.	Resignation.
<b>ATTORNEY GENERAL'S OFFICE.</b>			
Roberto H. Todd, Jr.	Temporary Inspector.	July 1, 1917	Nov. 30, 1917
Nemesio R. Canales.	Law officer.	Oct. 3, 1917	Apr. 19, 1918
Miguel A. Muñoz.	do.		Nov. 30, 1917
Roberto H. Todd, Jr.	do.	Dec. 1, 1917	
Carlos Llauger Díaz.	Inspector.	Jan. 1, 1918	
Earle T. Fiddler.	Assistant Attorney General.		May 15, 1918
George Swift Brengle.	Law officer.		Do.
Ferdinand Tannenbaum.	do.	May 17, 1918	May 16, 1918
Do.	Assistant Attorney General.	June 17, 1918	
Luis Samalés Iglesias.	Law officer.		
<b>SUPREME COURT.</b>			
Pablo Berga.	Secretary and reporter.		Feb. 28, 1918
Joaquín López.	do.	June 10, 1918	( <sup>1</sup> )
<b>DISTRICT COURTS.</b>			
Angel Acosta Quintero.	Fiscal, Mayaguez.	Sept. 6, 1917	
Libertad Torres Grau.	Fiscal, Ponce.		<sup>1</sup> Sept. 5, 1917
Rafael Rivera Zayas.	Substitute Judge, Humacao.	Sept. 1, 1917	Oct. 20, 1917
José E. Benedicto.	Judge, San Juan, section 1.		Sept. 5, 1917
Santiago Vivaldi Pacheco.	Fiscal, Guayama.		Sept. 11, 1917
Do.	Fiscal, Ponce.	Sept. 12, 1917	
José E. Figueras.	Fiscal, Aguadilla.	do.	
Jacinto Texidor.	Judge, San Juan, section 1.	Oct. 4, 1917	
Rafael Cuevas Zequeira.	Judge, Humacao.	Nov. 1, 1917	
J. A. López Acosta.	Judge, Guayama.	do.	
Domingo Sepúlveda.	Judge, Ponce.	do.	
José N. Quíñones.	Assistant fiscal, San Juan.		Nov. 20, 1917
Do.	Fiscal, Guayama.	Nov. 21, 1917	
Rafael Rivera Zayas.	Assistant fiscal, San Juan.	Jan. 18, 1918	
<b>MUNICIPAL COURTS.</b>			
Tomás Olivieri Santoni.	Judge, Yauco.		Aug. 11, 1917
Ramón Lebrón.	Judge, Patillas.		Sept. 25, 1917
Rafael Nicolau.	do.	Oct. 17, 1917	
Luis Peryó Quíñones.	Judge, Humacao.		Nov. 21, 1917
Luis Toro Pérez.	Judge, Yabucoa.		Nov. 30, 1917
Victor Bursat.	Judge, Humacao.	Feb. 21, 1918	
Arturo Martínez.	Judge, Yabucoa.	Feb. 28, 1918	
Francisco del Valle, Jr.	Judge, Aguadilla.		Feb. 22, 1918
Agustín E. Font.	do.	Feb. 23, 1918	
Felipe Colón.	Judge, Yauco.	Oct. 2, 1917	Feb. 24, 1918
Cristino R. Colón.	Judge, Adjuntas.	Feb. 25, 1918	
R. Arjona Siaca.	Judge, Yauco.	do.	
Fernando Janer Landrón.	Judge, Adjuntas.		<sup>1</sup> Do.
Román Díaz Collazo.	Judge, at large.		Mar. 1, 1918
Gabriel Castejón.	Judge, Bayamon.		Do.
Do.	Judge, at large.	Mar. 2, 1918	
Alberto Brusi.	Judge, Arecibo.		<sup>1</sup> Feb. 28, 1918
Rafael Hernández Usara.	Judge, Utuado.		Do.
Do.	Judge, Arecibo.	Mar. 1, 1918	
Marcelino Romany.	Judge, Bayamon.	Mar. 2, 1918	
Francisco Nogueras.	Judge, Barros.	Mar. 5, 1918	
José Soto Soto.	Judge, Carolina.	Mar. 2, 1918	
Tulio Rodríguez Muñiz.	Judge, Camuy.	Mar. 1, 1918	
Stimplicio J. Cordero.	Judge, Ciales.		<sup>1</sup> Do.
Rafael A. Cancel.	do.	Mar. 1, 1918	
Pedro Manzano Avifó.	Judge, Guayama.	Mar. 2, 1918	
José Aponte Picó.	Judge, Juana Díaz.	Mar. 4, 1918	
Tomás Bryan.	Judge, Mayaguez.	Mar. 1, 1918	
Federico Schreder.	Judge, Manatí.	do.	
Gustavo Jiménez Sicardó.	Judge, Río Grande.	Mar. 4, 1918	
Manuel Iriarte.	Judge, Río Piedras.	do.	
William J. Santos.	Judge, San German.	Mar. 1, 1918	
Modesto Aponte.	Judge, San Lorenzo.	Mar. 4, 1918	
José C. Rivera.	Judge, San Sebastian.		<sup>1</sup> Do.
Buenaventura Esteves.	do.	Mar. 1, 1918	
Francisco Cadilla.	Judge, Utuado.	do.	
José Náter Girona.	Judge, Vega Baja.		<sup>1</sup> Do.
Ernesto Díaz Arana.	do.	Mar. 1, 1918	
Manuel A. Guzmán.	Judge, Añasco.		<sup>1</sup> Mar. 18, 1918
Manuel Janer Soler.	do.	Mar. 19, 1918	( <sup>1</sup> )
Antonio Torres Córdova.	Judge, Salinas.		Mar. 31, 1918
Fernando H. Usara.	do.	Apr. 1, 1918	
José J. Aponte.	Judge, Cayey.		<sup>1</sup> Do.
Antonio Torres Córdova.	do.	Apr. 1, 1918	

<sup>1</sup> Recess appointment.<sup>1</sup> Office term expired.

TABLE 48.—*Change in the personnel of officers of the department of justice during fiscal year 1917-18—Continued.*

Name.	Office.	Appointment.	Resignation.
<b>REGISTRIES OF PROPERTY.</b>			
Francisco G. Descartes.....	Registrar, Humacao.....		<sup>1</sup> Oct. 29, 1917
Rafael López Antongiorgi.....	Temporary registrar, Humacao.....	Nov. 1, 1917	
José S. Belaval.....	Registrar, San Juan, section 1.....		<sup>1</sup> Dec. 16, 1917
Manuel Paz Urdaz.....	Temporary registrar, San Juan, section 1.....	Dec. 17, 1917	Mar. 6, 1918
Rafael Tirado Verrier.....	Registrar, Mayaguez.....		Do.
Do.....	Registrar, San Juan, section 1.....	Mar. 7, 1918	
Augusto Malaret.....	Registrar, Guayama.....		Mar. 5, 1918
Do.....	Registrar, Mayaguez.....	Mar. 7, 1918	( <sup>2</sup> )
Pedro Gómez Lasserre.....	Temporary registrar, Guayama.....	Mar. 6, 1918	

<sup>1</sup> Died.<sup>2</sup> Recess appointment.

## EXHIBIT NO. 49.—ORGANIZING GRAND JURIES.

JULY 20, 1917.

HONORABLE DISTRICT FISCAL,  
—, P. R.

SIR: Owing to the decision of the Supreme Court of Porto Rico to the effect that Porto Rico is an organized and incorporated Territory of the United States, and that the fifth amendment to the Constitution of the United States is applicable to Porto Rico, it seems advisable in order to avoid an entire interruption in the enforcement of the penal laws of Porto Rico in cases of capital or other infamous offenses to request the district courts having jurisdiction for the trial of such offenses to provide for the inauguration of a grand jury.

While the statutes of Porto Rico do not at present provide for a grand jury, nevertheless it is clear that if the fifth amendment to the Constitution of the United States is applicable to Porto Rico, as has been decided by the Supreme Court of Porto Rico, the courts with jurisdiction to try cases of capital or other infamous offenses have jurisdiction to summon a grand jury, which is an indispensable requisite to the trial of such cases. Many cases could be cited upon this point. I refer you especially to the case of *Glawson v. United States* (114 U. S., 477, at p. 487), which quotes from the opinion of Mr. Justice Marshall in *United States v. Hill* (26 Fed. Cases No. 15364).

There appears to be only one difficulty, and that is that there is no provision by law for the payment of the traveling expenses and per diems of grand jurors. However, I believe that it will be possible for the time being to secure grand jurors who will be willing to render their services gratuitously in case no provision can be made for their payment. I request, however, that you keep separate accounts of the expenses of any grand jurors who may be called.

The grand jury which the court has the inherent power to summon must be the kind of a grand jury and the proceedings must be such as to comply with all the provisions of the Constitution. The common-law grand jury in force at the time of the adoption of the United States Constitution, irrespective of statutory provisions, will comply with this requirement of the Constitution. It will, of course, be necessary to make a study of the grand jury system and to decide questions which can not all be anticipated at this time. However, the salient features of the common-law grand jury are easily defined. The following suggestions have been prepared for your guidance, in case the court decides to summon a grand jury at the present time.

At such time as the judge of the court may order, the secretary of the court should select by ballot the names of 30 jurors from the regular jury list of the court in the same manner as the petit jury is selected. Upon an order from the judge of the court, under the seal of the court, commanding the marshal to summon without delay the persons so drawn, the said marshal should summon such persons by personally serving them with a summons, and at the same time showing to the person served the order of the court directing such service. After service is made upon the persons named in the order of the court, the marshal should return the order in person to the court, showing the names of the grand jurors summoned.

At such times as the court may so order, the secretary should select by ballot 23 from the list of 30 persons who have been summoned to serve as grand jurors.

The general qualifications and exemptions in the case of grand jurors should be the same as the general grounds of challenge prescribed by law for petit jurors (sec. 225,

Penal Code) and the judge, after informing the 23 persons so drawn of the general grounds for disqualifications and exemptions, should excuse those disqualified or exempted by law.

Every grand jury impaneled before any court should consist of not less than 18 persons, nor more than 23. Should a sufficient number of grand jurors be excused from service to reduce the panel to less than 18, the court should order the selection by ballot from those originally summoned, of additional jurors, until not less than 18 and not more than 23 qualified grand jurors have been selected and approved by the court.

The secretary of the court should administer the following oath of office to the foreman, who should rise and be sworn, as follows:

"You do solemnly swear that you shall diligently inquire and true presentment make of all such matters and things as shall be given you in charge. That the counsel for Porto Rico, your own and your fellows you shall keep secret, exempting if you be required in a court of justice to make disclosure. That you shall present no one through envy, hatred, malice, or ill will; neither shall you leave anyone unrepresented through love, fear, favor, affection, or hope of reward, but will present things truly, as they come to your knowledge, according to the best of your understanding. So help you God."

The secretary of the court should then administer the following oath to the other jurors:

"The same oath that your foreman hath taken on his part, you shall well and truly keep and observe on your respective parts. So help you God."

The judge should appoint the foreman of the grand jury, who shall exercise the same powers and perform the same duties with respect to deliberations and the returning of presentments and indictments as is exercised by the foreman of the petit jury in the trial of cases. He shall return and announce all presentments or indictments to the court which are found by the grand jury, but no indictments shall be returned except in the presence of all the members of the grand jury which found the same.

The grand jury should remain in session until the end of the term of court for which it is impaneled, unless sooner discharged by the judge, and the judge may discharge it whenever he shall deem a continuance of the sessions of such jury unnecessary. The judge may appoint attendants to attend upon the grand jury, and for other necessary purposes, but such attendants should not be permitted to be present at any of the deliberations of the grand jury.

The judge shall explain its duties and charge the grand jury after it is impaneled.

The grand jury should consider all the evidence presented which may throw light upon the matter under consideration. If, in the course of its inquiries, it has reason to believe that there is other evidence, not presented to it, which would qualify or explain away the charge under investigation, it should order such evidence to be produced. This does not mean that the accused should be called. To permit the accused to testify would raise serious questions as to his immunity from prosecution. To justify the finding of an indictment, it is not necessary that the grand jury is convinced beyond a reasonable doubt that the accused is guilty. It is the duty of the grand jury to determine whether there is probable cause to believe that a crime was committed by the accused, and to determine whether the evidence before it unexplained and uncontradicted would warrant a conviction by a petit jury.

The court should, upon the request of the grand jury, or the district fiscal, issue summons for witnesses for examination before the grand jury. Such summons should state the name of the parties with respect to whom the witnesses will be called to testify, and shall be served in the same manner as summons for witnesses before a petit jury. Witnesses previous to testifying before a grand jury should take the following oath in open court:

"You do solemnly swear that you will true answer make to all questions asked you by the fiscal or by any member of the grand jury and that you will not reveal anything said or done while you were before the grand jury. So help you God."

The witnesses should be examined first by the fiscal or properly qualified prosecuting attorney, and then any member of the grand jury should be allowed to further examine him. The fiscal should assist and advise the grand jurors in regard to matters on which they are to pass, and aid in the examination of witnesses, and give such general counsel as they may require.

Investigations before grand juries should be made so far as practicable in accordance with the rules of evidence prescribed for proceedings before petit juries. All proceedings before a grand jury must be conducted in secret, and no person, except a properly qualified prosecuting attorney, should be present at the examination of any witnesses except that the court interpreter may be admitted when required, after taking a proper oath, except during the deliberations and decisions of the grand jury.

All deliberations and voting of the grand jury must be in secret, and no person shall be present other than grand jurors during their deliberation and voting.

All examinations of witnesses before the grand jury should be preceded by an indictment formally prepared by the district fiscal and presented as an accusation in the case in which such witnesses are to be examined, and no fiscal should prepare and present such formal accusation except in case a capital or otherwise infamous crime has been committed.

After all the evidence is introduced in a proceeding, both to the satisfaction of the members of the grand jury and to the district fiscal, the grand jury should retire for the deliberation and consideration of the case. However, if the grand jury desires any further information than that offered in the general charge of the court, it may return to the court and make application in writing therefor.

The concurrence of 12 grand jurors is necessary in order to find an indictment. When an indictment is found, it should be returned by the foreman in open court while the judge is presiding and in the presence of the grand jury.

Such indictment must then be deposited with the secretary, to be kept with the papers in the cause. The foreman of the grand jury should indorse "True bill" upon the indictment as presented; or if the grand jury finds that there is not sufficient evidence to present an indictment he should indorse "Not a true bill."

The record of the secretary must show all the proceedings, except the secret proceedings of the grand jury, including the return of the order of summons and the selection of the jurors, the due finding, return in open court and filing of the indictment.

After the return of an indictment, process should be issued for the arrest of the defendant, if not in custody.

Respectfully,

HOWARD L. KERN,  
*Attorney General.*

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EXHIBIT No. 50.—ORGANIZATION OF GRAND JURIES.

JULY 20, 1917.

HONORABLE DISTRICT JUDGE.

— P. R.

SIR: I inclose herewith a copy of a letter which I have just addressed to each of the district fiscals in regard to the organization of the grand jury in the district courts. I have directed the fiscals to request the judges of the various courts to organize a common-law grand jury whenever it may be necessary in order to see that there is no vacuum in the enforcement of the penal laws of Porto Rico in the cases of capital and other infamous offenses. This matter is one which is within the inherent power of the court if it is true that Porto Rico is incorporated Territory of the United States. I believe it is preferable to have this matter done by each court in its discretion without any rule of court to that effect, and I have submitted it to the fiscals for them to present it to the court for such action as the court believes advisable. I will forward to you shortly a copy of a memorandum which I am preparing for the fiscals, showing the power of the court to take this action.

If the grand jury is to be summoned at the present time in your court, the court will be unhampered by any restrictions other than those imposed under the common-law procedure, and the success of the grand jury will depend largely upon the judge of the district court. I believe that the instructions to the grand jury will be one of the most important functions which the district courts will have to perform. I do not believe that the necessity of secrecy in the proceedings can be overemphasized. They should understand that not only are the proceedings secret while they are being carried on, but that neither the grand jurors, nor the witnesses, nor the prosecuting attorneys should in any manner reveal any of the proceedings before the grand jury after the proceedings have been completed. It is also important to see that while a grand jury has an indictment under consideration the members do not have contact with the outside public, but that they should be guarded with the same care as a petit jury receives while it has a case under consideration.

If you wish any further data or assistance upon any of the points in connection with the grand jury I will be glad to have them briefed in this office and forwarded to the fiscal to be submitted to the court.

You will find an example of the instructions to the grand jury given by the honorable judge of the United States District Court for Porto Rico in Sixth Porto Rico Federal, 148; and also the various articles on the grand jury in textbooks and in Ruling Case Law and Cyclopaedia dealing with this subject. The inclosed memorandum contains many of the points that will arise.

Respectfully,

HOWARD L. KERN,  
*Attorney General.*



## EXHIBIT No. 51.

*To the judges and district attorneys of Porto Rico:*

The mobilization of nearly 13,000 of the best men of Porto Rico has just been completed, and every loyal American citizen looks with pride at the efficient organization and management of that great training station of these National Army men at Camp Las Casas. We have reason to be proud of the splendid spirit with which the people of Porto Rico have responded to the Nation's call for this selected body of young men of the finest manhood of Porto Rico.

Their task and that of their officers is to prepare them to take their part in the great fight for civilization, liberty, and democracy. One of the most important parts of this preparation is the maintenance and improvement of their physical and moral condition. In this task we now have the opportunity to cooperate and render a service of inestimable value in the suppression of conditions of vice and prostitution, not only in San Juan, but in all parts of Porto Rico. It is well known that prostitution is the greatest producer of ineffectives in a military camp for the training of soldiers. Our lawmakers have done their part in making possible the effective control of this evil. We are now called upon to do ours. It is with great confidence that I issue this appeal to you to place Porto Rico in the front rank in overcoming this great evil. You have repeatedly responded in the most patriotic manner to the many calls for service that have been made upon you. Many of your associates have responded with the offers of their lives. You have aided beyond estimation in the work of the selection of these men. You have served on local boards, as representatives of the Provost Marshal General, or legal advisers, and in every possible way. You have responded magnificently to the calls made by the Red Cross and for the Liberty loans, and have aided in the detection and prosecution of our enemies. I know that you will not now fail in the great task before you of protecting the health and morals of our soldiers.

The benefit of a successful campaign against vice will accrue not only to the soldiers but to the whole population of Porto Rico, and not only for the present, but for many future years. You will have the cooperation of all loyal and patriotic citizens. Facilities will be provided so that the women who are engaged in the nefarious traffic will be benefited by its suppression. We have facilities in our district jails to properly and comfortably confine hundreds of them, if necessary, and they will be provided with proper food and medical treatment. We can count upon the assistance of the department of sanitation, the Red Cross, the Army, and other organizations in the proper care of these unfortunates should the resources already provided prove insufficient.

This is not a campaign in which we can wait for the other fellow to take the first step. We should seek to promote the success of the campaign by publicity and by engaging the practical cooperation of every available force. It is the duty of the district attorney and committing magistrates to help the military and civil police and the detectives, and every person who is willing to aid in this work, by pointing out the laws and preparing the informations and indicating the kind of evidence that will be necessary for convictions.

The district attorneys will have to go further and aid in securing the evidence and in preparing the cases. The trial judges will be able to do their part in their sentences. If there is any weak link in the chain, report it in order that it may be corrected. If any official fails to do his duty, report him and he will be removed and a more efficient and patriotic man will be appointed in his place. We must face the conditions as they are. It is not our task to ask or reason why, but to do. Prostitution exists in every district, and it is taking its terrible toll of diseased victims already among our soldiers as well as in the civil population. The problem is not confined to San Juan, Bayamon, Rio Piedras, and other cities near the cantonment. Our soldiers will be on leave in other communities.

Our next draft will be called from every town and barrio. If any community or town fails to rid itself of these sources of infection, that community or town will probably be barred by the military authorities to soldiers, and the innocent will suffer more than the guilty. Patriotic organizations and people are preparing wholesome amusements and diversions for the boys on leave. We do not need to overlook these activities and can lend them every aid, but the officials of the department of justice of Porto Rico will be held responsible for the suppression of the illegal conditions of vice.

It has been with the purpose of aiding in this work that these extracts of our laws in regard to prostitution and the sale of intoxicating liquors have been prepared and are being published in a convenient form in this pamphlet. Information will be requested from time to time and will be compiled and the results achieved will be given due publicity, and will be reported to the Commission on Training Camp Activi-

ties, and in special reports, and in the annual report to the honorable governor of Porto Rico. We have already had, since last February, about 100 convictions for violation of our statutes and municipal ordinances in regard to prostitution and disorderly conduct. Municipalities can help with municipal ordinances, but the main reliance must be placed upon the statutes herein collected. The penalties which the municipalities are allowed to prescribe are limited, and 15 or 30 day sentences and fines alone can not overcome the forces of prostitution. They must be placed beyond the possibility of committing further acts. The limit of the law is none too severe for those who violate it when the consequences of the violation are so great, and especially is this true of those who profit by the exploitation of others in the organization of vice and who profit by their consent thereto, and in the letting of rooms, apartments, and houses for immoral purposes.

HOWARD L. KERN,  
*Attorney General of Porto Rico.*

SAN JUAN, July 22, 1918.

EXHIBIT NO. 52.—IN RE MARRIAGES OF MEN CALLED IN THE DRAFT.

JULY 31, 1918.

CIRCULAR NO. 376.

*To the municipal judges and justices of the peace of Porto Rico:*

On June 29, 1918, I sent to you a telegram recommending that you use your utmost endeavors to encourage the marriage of every man who was called to the military service and who had been living for more than two years with a woman in the relation of husband and wife. The purpose of this action is to protect the rights of the dependent wives and children to the allowances and compensation claims which are awarded by the United States Government to the dependent families of soldiers. You were further urged to perform all of the ceremonies without any charges whatsoever to the drafted men.

Since that telegram was sent to you, it has been announced that approximately 15,000 more men will be called from Porto Rico about September 1. These men will soon be called for physical examination. It is equally important that the same action be taken with regard to those men as was taken with regard to the men in the last draft, and I again urge upon you the importance of calling the attention of each man who is accepted for service and who has dependents of this character to the fact that it is important for their protection that their status be legalized before entering into the Army. I believe that this can be done more easily with the next contingent of 15,000 men at the time of their physical examination by the local boards, but of course in case it is impossible to perform the ceremonies at that time, it will be advisable to arrange for them before the time of their mobilization. You will doubtless be able to cooperate with the members of local boards of exemption, with the priests and ministers in the locality, with the local organization of the Red Cross, and with other persons and bodies, but you should take the responsibility of this work and see that the matter is brought home to all of these men.

I do not mean to urge in any way men who do not have wives or who have not been living with women for a period of two years to get married at the present time, inasmuch as this would increase the expense of the National Government. My desire is to clarify the status of those men who have actually been living with their dependent families for a period of two years. With regard to other cases, it is a question for the individual men, and I do not believe that we should attempt to influence their decisions one way or the other.

I request that you please give me a list of the marriages that you performed in accordance with my telegram of June 29, 1918, up to and including July 31, 1918, and that you supplement this list with a list of other persons under similar circumstances who were married during the same period. This can be secured from the secretary of the civil registry, and can be checked with the lists of the local board of military registration and by interviews with the persons who celebrated the marriages. I do not wish that any marriage should be included in this list of any persons except those who have been living naturally prior to the time of the celebration of their marriage.

I also desire that you send me at the conclusion of the physical examination for the next call a list of the marriages performed by you in accordance with this circular.

Many questions arose as a result of my previous telegram. These questions, as a rule, related to the power to marry persons who had been living together naturally when there existed a relationship between the parties within the fourth degree of

consanguinity. It is clear that no marriage can be celebrated of these men except such as would be lawful under the laws of Porto Rico, and in case the consent of the district court is necessary in order to make the marriage lawful, a petition should be directed to the judge of the district court to authorize any marriage within the fourth degree of consanguinity.

It is also clear that no marriage can be performed where either of the parties is lawfully married to any other person. All of the requirements of the laws in regard to marriage should be carried out exactly as in the case of any other marriage.

Please acknowledge receipt of this circular.

Respectfully,

HOWARD L. KERN,  
*Attorney General.*

## APPENDIX IX.

### REPORT OF THE COMMISSIONER OF AGRICULTURE AND LABOR.

OFFICE OF THE COMMISSIONER,  
*San Juan, P. R., August 15, 1918.*

The honorable the GOVERNOR OF PORTO RICO,  
*San Juan, P. R.*

SIR: In compliance with section 13 of the organic act of Porto Rico, of March 2, 1917, I have the honor to hereby render the annual report of the department of agriculture and labor for the fiscal year 1917-18.

#### AGRICULTURE.

Great efforts had to be made by this department in the fiscal year aforementioned to carry out its work in the branch of agriculture, contending with great difficulties. Its technical force has been diminished because of the young men of profession who have joined the training camp in Porto Rico and of others whose services have been solicited by institutions of agriculture in the United States, offering them larger salaries than those which they receive here, and notwithstanding the examination notices given in Porto Rico, through the civil service, no technical personnel with experience in certain specialties has been found in the island. Two positions of assistants in the insular experiment station have been filled with young men graduated from the college of agriculture at Mayaguez. A law organizing the services of agriculture in this department was enacted by the legislature in November, 1917, but its appropriations did not take effect until the 1st of July of the present year.

#### MUNICIPAL BOARDS OF AGRICULTURE.

Another act passed also by the legislature, creating a board of agriculture for each municipality, took effect in June, 1918, by virtue of the appointment made by the governor of the candidates proposed by the municipal councils, with the exception of Manabo and Morovis, that have not proposed them as yet. The purpose of these boards, among others, is to cooperate with the department of agriculture and labor in the progress and for the benefit of agriculture and the industries derived therefrom, patronizing, encouraging, and developing the agricultural interests in the municipality where the board operates pursuant to the instructions of the department.

#### FOREST SERVICE.

In accordance with this department, the Governor of Porto Rico, by virtue of the authority conferred upon him by the act providing a forest service in Porto Rico, approved November 22, 1917, issued a proclamation on May 28, 1918, setting apart as insular forests all the mangroves on the coast of the island of Porto Rico and adjacent islands, belonging to the people of Porto Rico, the felling of trees thereon and, the taking away of any wood therefrom for fuel, charcoal burning, or for any other purpose being thereby prohibited, in accordance with rules and regulations to be established by the commissioner of agriculture and labor. Such measure is a very opportune one, by reason of the present circumstances, which warrant the utmost care in the exploitation and consumption of the natural resources of the island.

The following are the mangrove swamps belonging to the people of Porto Rico:

Municipality.	Acres.	Municipality.	Acres.
San Juan.....	711.50	Juana Diaz.....	150.00
Bayamon.....	1,351.85	Ponce.....	246.00
Rio Piedras.....	917.34	Panuelas.....	20.25
Carolina.....	945.04	Guayanilla.....	560.96
Rio Grande.....	250.00	Yauco.....	1,010.17
Loiza.....	1,043.68	Lajas.....	1,041.76
Fajardo.....	300.50	San German.....	445.00
Ceiba.....	1,279.75	Cabo Rojo.....	1,744.51
Naguabo.....	240.00	Mayaguez.....	101.00
Guayama.....	1,671.79		
Santa Isabel.....	495.75	Total.....	14,526.94

## AGRONOMIC DIVISION OF THE ISLAND.

The act organizing the services of the bureau of agriculture in the department of agriculture and labor creates 2 positions of agricultural district inspectors and 10 district assistant inspectors.

The island has been divided into two agronomic districts, in charge of each of which there shall be an inspector; and each district has been divided into five divisions, in charge of each of which there shall be an assistant inspector.

On making the divisions account has been taken of the climate, soils, and plants raised thereon, total number of acres of land and number of farms into which the same is divided, and the means of communication; the aim being to group into each division territories of equal climate, equal soil and equal products, so that each division may form a homogeneous whole as far as possible. At the same time the purpose has been directed to have the divisions in each district cover approximately the same number of acres, whole and contiguous municipalities, and easy communication by insular and municipal roads.

It is evident that all these conditions can not be met at the same time, mainly, when the number of divisions is limited to 10.

The parallel of 18° 15' has been adopted to separate the agronomic districts into which the island should be divided, in accordance with the conditions which have been established; all the towns lying north of that parallel being assigned to the first district, and those south of it being included in the second district.

The need of complying with the larger number of the conditions above stated requires, nevertheless, the inclusion in the first district of the towns of Adjuntas, Jayuya, and Naguabo, which are south of parallel 18° 15', because the climate, the soil, the products, and the very means of communication call for the placing of Adjuntas and Jayuya together with Utuado, and Naguabo with Ceiba. It has also been necessary, in the first district, to group into only one division towns comprising different zones of production.

The number of divisions has been limited to 10, not by reasons of administrative and technical nature, as it should be, but, as aforesaid, to comply with the provisions of the law which only took into account, on providing 10 assistant inspectors, the expenses incurred.

The following are statements showing the agronomic divisions, with expression in each of them of the number of acres of land under cultivation, number of acres of land devoted to forests, number of acres of uncultivated land, total number of acres of land, and number of inhabitants in each division:

## FIRST DISTRICT.

Division.	Number of farms.	Acres under cultivation.	Forests.	Uncultivated acres.	Total of acres.	Number of inhabitants.
First.....	8,702	134,553	15,557	39,633	189,743	94,723
Second.....	5,775	141,262	32,512	36,137	211,774	86,533
Third.....	4,760	140,675	32,959	21,957	195,591	73,293
Fourth.....	6,801	163,446	24,979	16,090	206,335	85,164
Fifth.....	4,804	158,877	31,474	17,321	207,672	133,424
Total.....	30,842	739,813	137,481	131,738	1,010,615	483,137

## SECOND DISTRICT.

Division.	Number of farms.	Acres under cultivation.	Forests.	Uncultivated acres.	Total of acres.	Number of inhabitants.
First.....	5,996	163,389	20,545	16,465	200,339	86,074
Second.....	4,858	158,509	22,837	10,234	191,524	71,121
Third.....	2,406	133,193	23,843	8,896	165,932	63,419
Fourth.....	5,911	174,926	47,104	33,573	255,999	99,581
Fifth.....	6,976	175,911	33,360	16,736	225,997	93,912
Total.....	26,147	605,928	147,689	86,194	1,039,651	414,117

As shown by the preceding tables, the total number of farms, acres of land under cultivation, and acres of land in general of the one district differ little from the total number of the other.

Municipalities in each agronomic division are as follows:

*First district.*—First division: Quebradillas, Isabela, Aguadilla, Aguada, San Sebastian, Anasco, and Rincon.

Second division: Camuy, Hatillo, Arecibo, Barceloneta, Manati, and Vega Baja.

Third division: Lares, Utuado, Jayuya, and Adjuntas.

Fourth division: Ciales, Morovis, Corozal, Naranjito, Bayamon, Toa Alta, Toa Baja, Dorado, and Vega Alta.

Fifth division: San Juan, Rio Piedras, Guaynabo, Trujillo Alto, Carolina, Loiza, Rio Grande, Luquillo, Fajardo, Ceiba, and Naguabo.

*Second district.*—First division: Humacao, Las Piedras, Juncos, Gurabo, Caguas, Yabucoa, Maunabo, and San Lorenzo.

Second division: Barros, Barranquitas, Comerio, Aguas Buenas, Cidra, and Coamo.

Third division: Patillas, Arroyo, Guayama, Cayey, Salinas, Santa Isabel.

Fourth division: Juana Diaz, Ponce, Penuelas, Guayanilla, Guanica, and Yauco.

Fifth division: Mayaguez, Las Marias, Maricao, Sabana Grande, San German, Lajas, and Cabo Rojo.

It has not been easy to find the technical personnel to fill the positions of district inspectors and assistant inspectors, notwithstanding the examination notice given by the civil service commission. This office has been unable to certify eligibles for the positions of district inspectors, because no masters of agronomical sciences, as required by law, have applied for the position. And as refers to assistant inspectors, out of the 10 proposed 3 were employed as assistants in the experiment station, and 5 only could be appointed as such assistant inspectors, because the others have joined the training camp.

To utilize the services of these assistant inspectors in the island, serious difficulties will have to be overcome, for \$500 is the only sum appropriated for all the traveling expenses of the personnel of the bureau of agriculture.

#### CADASTRAL TOPOGRAPHIC PLAN OF PORTO RICO.

It seems opportune to hereby invite attention to the urgent need of making a cadastral topographic plan of the island, for the good administrative organization of all the departments of the insular government and specially of the department of agriculture and labor.

Such plan will be to the department of agriculture and labor as the basis for making the agronomic and the forest plans; to the treasurer's office, for the real estate plan indispensable for the wise apportionment of taxes; to the department of the interior, for planning out the roads and irrigation canals, and for the making of the geological plan, as the only means of knowing the mineral resources of the island, which is so essentially necessary to the engineer of public works and the sanitary engineer for the drafting of their projects and the study of their decisions.

The expenses originating from the field and office work necessary for the making of the topographic plan are remunerative, not only because of the value of the services that the plan is to render and the economy in the expenses of the administrative service, but also because of the amounts that the property owners should have to pay for the demarcation of their estates and the acquisition of the plans of their landed property.

#### REVIEW OF AGRICULTURE.

The department has begun editing a Review of Agriculture for the publication of articles popularizing agricultural knowledge, and to which technical articles are contributed by the members of the staff of the insular experiment station. Three numbers have already been published, to the distribution of which the greatest possible intensity has been given.

#### INSULAR EXPERIMENT STATION.

The activities of the insular experiment station during the year have been as follows:

*Division of entomology.*—This division has conducted work during the past year along the following lines: (1) Inspection and quarantine, where necessary, of all parcels or shipments of plants or plant products entered at the ports of San Juan, Ponce, Mayaguez, or Ensenada, and of all baggage entered at said ports which contained plants, fruits, seeds, or other plant products; (2) conducting of field and laboratory experiments designed to discover or improve methods for the control of insects injurious to all crops of economic importance on the island; (3) the making of field trips of investigation or survey to obtain information relative to insect pests; (4) the answering of correspondence and inquiries directed to the station relative to insect outbreaks and their control; (5) the writing and compiling of minor publications and articles on insect control for the enlightenment of the island public; and (6) the usual office and laboratory routine of making and tending the insect collection, conducting

rearing experiments, and indexing and filing the publications received relative to insects and their control.

The rules and regulations made by the plant quarantine service in regard to the introduction of plants and seeds into Porto Rico have been regularly enforced in San Juan, Ponce, and Mayaguez during the year and in Ensenada during the grinding season by the inspectors in charge of the work.

The total number of inspections of plants and seeds and plant products, by ports, from July 1, 1917, to June 30, 1918, were as follows:

San Juan .....	1,157
Ponce.....	13
Mayaguez.....	15
Ensenada.....	43
Total.....	1,228

The following is a table showing the pests, diseases, or other cause for treatment of all plant parcels or plant products other than fruits arriving at San Juan that were fumigated, quarantined, returned, or destroyed; the plant or product treated; the source from which such parcels came; and the treatment given:

Number of parcels.	Insects, diseases, or cause for treatment.	Plant or product treated.	Source of parcel.	Nature of treatment.
28	Aphis .....	Rose .....	Ohio .....	Fumigated.
12	do .....	do .....	Pennsylvania .....	do.
1	do .....	do .....	Indiana .....	do.
4	do .....	do .....	Illinois .....	do.
4	do .....	do .....	Pennsylvania .....	do.
1	do .....	Pansy .....	Ohio .....	do.
1	do .....	Carnation .....	do .....	do.
1	do .....	Chrysanthemum .....	New York .....	do.
1	do .....	Fern .....	Ohio .....	do.
1	do .....	Chrysanthemum .....	do .....	do.
1	do .....	Geranium .....	Pennsylvania .....	do.
1	White fly .....	do .....	New York .....	do.
1	do .....	Carnation .....	Ohio .....	do.
1	Mealybug and aphid .....	Phoenix .....	Pennsylvania .....	do.
3	do .....	Pahia .....	Ohio .....	do.
1	do .....	Fern .....	New York .....	do.
1	Red spider .....	Palm .....	Illinois .....	do.
1	do .....	Violet .....	New York .....	do.
1	Scale .....	do .....	Illinois .....	do.
1	From canker state .....	Lemon .....	Curacao .....	Returned.
1	do .....	do .....	Westgrove, Pa .....	do.
1	do .....	do .....	Pennsylvania .....	do.
1	Mite .....	Roots .....	Ohio .....	Fumigated.
1	do .....	Begonia .....	New York .....	do.
1	do .....	Peony .....	Indiana .....	do.
1	do .....	Bulb .....	Ohio .....	do.
1	Beetle .....	Geranium .....	Illinois .....	do.
1	do .....	do .....	Ohio .....	do.
1	Badly decayed .....	Tubers .....	California .....	Destroyed.

Total fumigated, 71; destroyed, 1; returned, 3.

Field trips made during the year have comprised mainly survey trips to various sugar centrals growing cane which is affected with the mottling disease to determine what insects could be found in those localities that might be directly or indirectly responsible for the spread of the disease. Much time has been spent in determining by circumstantial evidence, the possible insect transmitters of the disease, and much more time will be spent in verifying if possible the deductions under laboratory conditions. A series of 12 large insect-rearing cages, all containing growing cane, has been erected to carry out the necessary experiments, which have already been begun and will be reported on in the future. Interesting and very important results are expected from these experiments.

*Division of agronomy and plant breeding.*—As much time as possible was given to research in cane breeding. An article was published during the year in the Journal of the Department of Agriculture on "Studies on inheritance in sugar cane," giving the result of study on seedlings produced from both open-pollinated and cross-pollinate parents. The following conclusions were drawn:

1. Seedling sugar canes in their first generation showed a degree of resemblance to the varieties from which they were produced.

2. The results of the work at this station indicate that resemblance of color is more marked than that of any other characteristic.

3. There is a wider variation in seedlings than in canes produced from cuttings of the same variety.

4. The greatest variation in seedlings produced from tassels of a single variety is in the size and form of the plants, and of their component parts.

5. Certain varieties produced better seedlings than others.

6. Abnormalities are common in seedling canes, whereas in canes produced from cuttings they are rare. Certain varieties produced many more abnormal seedlings than others.

7. New types of cane are produced by crossing varieties.

8. Variation is apparently increased by a single combination of two varieties.

9. Crossing seems to produce a recombination of characters of the parents in some of the resulting seedlings, this probably being due in a measure to dominance of certain characters derived from each parent.

10. Only slight differences in sugar content of the juice have been observed between groups of seedlings produced from different varieties.

The seedlings raised in 1916-17 from cross-pollinated parents were planted in separate lots according to parentage and notes made on their visible characteristics, which correspond well with the conclusions enumerated above drawn from work done the previous year.

Cross-pollination of varieties for the production of seedlings was carried on as in the preceding year and about 1,800 crossed seedlings were obtained.

Selection work with seedling canes was conducted as in previous years, several promising new seedlings having been isolated from canes selected three and four years; i. e., the 1913 and the 1914 seedlings. They are also considered new varieties and are ready to be tested in various parts of the island.

Several of the new varieties tested last year, i. e., the 1912 seedling cane varieties, also continue promising. These varieties are now ready to be tested by interested cultivators over the island. Out of 12 sent to the Guanica centrale, 4 were selected as worthy of further trial at that place, of which 2 are making an especially fine appearance. Five of said varieties are most promising at this station.

The testing of foreign varieties of cane has been continued; but on a somewhat larger scale than before, especial attention being paid to resistance to the "mottling disease." No varieties have as yet been found which are immune to the disease. However, Yellow Caledonia, B-4596, and B-3412, have been found least affected by the disease in the localities where the experiments were conducted.

A limited amount of breeding work was done with vegetables. The second filial generation of the tomato cross previously reported on was grown. No plant occurred with fruit sufficiently large to make it more desirable to cultivate than existing varieties, notwithstanding the prolificacy and disease-resistant character of the hybrid plants in general.

The first filial generation of two melon crosses were also propagated. A different type of melon was produced by each cross. In both cases the plants were more precocious and more prolific than the local melon, the latter being rather a shy bearer.

An investigation into the type of tobacco cultivated in Porto Rico was undertaken. The tobacco cultivated in the island shows a very great amount of variation, and offers a good opportunity for selection since the types are no doubt of very different commercial value. No doubt natural cross-pollination sometimes occurs, and for this reason the seed presumably does not reproduce true to type. Photographs were made of several types, and, of some of those, seed from self-pollinated plants was saved for the purpose of studying the progeny as to the range and character of the variation.

Fertilizer experiments with cane were conducted as before and a fertilizer experiment with pineapples was also carried through the year. The results of the cane experiments are in agreement with those obtained in the two years previous; phosphoric acid is greatly needed by this station soils, next nitrogen; potash is least essential. Lime appears also to be a limiting factor in the plot.

*Division of pathology and botany.*—The investigational work of this division has been largely confined to studies of the "mottling disease" of sugar cane, the disease which has been causing heavy losses to the industry in several seasons past. A wide range of field and plant-house experiments and inquiries have been made with a view to obtaining all possible data as to the nature of the disease and its cause. It appears from the results obtained that the disease so-called "mottling" in Porto Rico is an infectious malady, certain to be transmitted through cuttings from infested sticks and very similar—if not identical—with the Yellow Stripe of Hawaii and Java. All varieties of cane grown in Porto Rico have proven susceptible to the disease; but some much more so than others, a few being rendered quite worthless when attacked, while others stand up well under the disease. According to the record of the cooperative



experiments of this station in various localities, the varieties least affected by the disease are B-4596, Yellow Caledonia and B-3412. Aside from these recommendations of a general character intended to favor and stimulate healthy growth, two main measures have been advocated for control—the destruction of all diseased stools and the planting of healthy cuttings of the more resistant varieties.

A bulletin on the citrus diseases has been prepared and published, in which the development of the citrus industry and the progress of disease investigations in Porto Rico are traced, the relations of topography and cultural practices to the prevalence of disease reviewed and available data given on the following specific diseases, malformations and other occurrences of interest to the grower: Damping off, crown rot, bench rooting, root disease, various rots, gummosis, pycnospora, or scaly bark, diploia canker and dieback, pink disease, exanthema, withertip, mistletoe parasitism, scab, melanose, algal leaf spot, freckling, molds, June drop, oil-burning of fruit, russetting or tear staining, silver-scurf, splits and creasing, buck-skin or shark skin, and smoky fungus. A bibliography, other useful data for control, and a list of fungi collected on citrus plants are appended.

About 1,083 specimens, for the most part fungi, have been added to the herbarium. The pathologist has continued as collaborator of the United States Department of Agriculture, plant disease survey. This arrangement facilitates the work of gathering information on plant diseases, and disseminating it among the growers.

The general nature and scope of the work of the division will be fairly well indicated by the publications enumerated hereafter in this report.

*Division of Chemistry.*—The work of this division has been handicapped during the last year by a number of adverse circumstances. The division was without any personnel for a considerable length of time, and when the new personnel was appointed on July 1, 1917, considerable time was lost on account of the lack of material and funds to obtain it. The deficiency of the fuel supply has been a constant source of worry, making the work unnecessarily slow and difficult, and it must be again insisted on the necessity of supplying the laboratory with a sure and efficient source of fuel, such as gas or electricity.

The work done during the year has been along the following lines:

1. The grapefruit investigation was continued along the same lines as the year before, the chief of the division making two trips every month to the fruit district during the harvesting season for the purpose of collecting samples.

The results of the work accomplished so far may be briefly stated as follows:

I. The varieties Marsh's Seedless and Duncan did not reach a ratio of 7 in adequate proportions for exportation until about the middle of November, while the Triumphs showed the ratio in every instance from the first sample picked in September, as may be seen from the following table:

Variety.	Date on which fruit reached a ratio of 7 or more.	Per cent of fruit which showed a ratio of 7 or more on the corresponding previous dates.	Date on which 100 per cent of the fruit showed a ratio of 7 or more, and average ratio on that date.	
		Per cent.	Date.	Ratio.
Triumph.....	September 22 (first sample picked each year).	100	Sept. 22	9.00
Marsh's Seedless...	October 3 to 6.....	50	Nov. 23	7.93
Duncan.....	November 2 to 15.....	46.87	Dec. 29	8.00

It is interesting to notice that the Triumphs, which were the first to show a ratio of 7, contained acid in the lowest proportion, while the Duncans, the last to show a ratio of 7, contained the highest percentage of acid.

II. In all three varieties the per cent solids in solution in the juice increased as the season advanced, and this increase continued gradually, even after a ratio of 7 was reached.

III. Almost all of the acid was formed in the fruit during the first stages of development, although in some cases acid is elaborated in small proportions even after the fruit has reached maturity. The per cent acid decreased as the fruit developed and matured, but this change did not take place to the same extent in all varieties. Thus, in the Marsh's Seedless the per cent acid decreased 0.02 per cent during one season and was practically constant in another, while in the case of the Duncans the decrease during two consecutive seasons was 0.16 per cent and 0.099 per cent, respectively, and in the Triumphs the decrease was 0.35 per cent. It seems, then, that some acid is elaborated in the Marsh's Seedless even after the ratio of 7 is reached.

IV. The total sugar content increased continually until maturity was reached, and then it remained practically constant; but the ratio between invert sugar and sucrose remained constant until maturity was reached, and then the ratio began to increase. This is in accordance with Collison's observations in Florida, that after the fruit matures inversion of the sucrose takes place.

V. After the fruit was picked it suffered very little changes in the composition of its juice; the only one worthy of mention being the inversion of the sucrose.

VI. Sweating the fruit did not introduce any appreciable change in the composition of the juice, except in the case of immature fruits, in which the changes were more evident. The most striking effect of sweating the fruit was the acceleration it caused in the inversion of sucrose. It must be stated that the acid content was strikingly constant.

VII. The per cent of juice in the fruit increased until maturity was reached, and then it remained practically constant; it is, however, different for different varieties, as may be seen from the following table of averages:

Varieties.	Per cent juice.
Marsh's seedless.....	46.63
Duncan.....	43.44
Triumph.....	32.71

VIII. The per cent skin, as well as the thickness of the skin decreased as the fruit matured, and then remained constant. There was very little difference in their content of skin among the different varieties studied as seen from the following table of averages:

Varieties.	Per cent skin.
Marsh's seedless.....	27.24
Duncan.....	28.25
Triumph.....	28.85

IX. The ratio increased slightly in one of the lots after being picked, and remained constant in two other lots. It was noticed, however, that the increase took place in that lot in which the fruit had reached a ratio of seven.

2. Fertilizer control: Samples were obtained from the mixers, dealers, and agents in San Juan. Ninety-four samples in all, of mixed fertilizers and fertilizer materials were analyzed, 36 samples taken by employees of this division, and 58 samples sent for analysis by interested parties.

Of the 36 samples collected by us, 23, or 63.8 per cent, were deficient in some ingredient and 1 did not have a definite guaranty, but offered a guaranty with a range of two points. Of 13 samples containing potash, 9 were deficient in this ingredient, or over 69 per cent of all samples collected; of 18 samples containing phosphoric acid, 14, or nearly 78 per cent, were deficient, and of 28 samples containing nitrogen, 8, or over 28 per cent, were deficient. There were 6 samples deficient in two ingredients, and 1 deficient in all three.

In 1916, 25.7 per cent of the samples analysed were deficient in some one constituent, while in 1914 to 1915 51.66 per cent of the samples had some sort of deficiency.

As seen, conditions improved in 1916, although they were not even then satisfactory, but they have been worse than ever this year, which shows that a closer supervision is required, for which personnel need be supplied.

3. Analyses of miscellaneous samples sent to the laboratory by officials of the department or by private parties. This work has included mainly fertilizer samples for the verification of their guaranty, soil samples for recommendations as to fertilizer needs, rock analyses for the purpose of classification by the assistant commissioner, and grapefruit samples for determining the ratio.

Fifty-eight fertilizer samples were sent by private parties, but only 14 guaranties were furnished by the persons concerned, and of these, 8, or over 57 per cent, were deficient in some element of plant food. Six samples of guano were included in this lot, of which 4 contained phosphoric acid ranging from 10 to 22 per cent. This shows a good proportion of guanos reached in this element, which are worth mining.

An important point to notice in connection with the soil analyses is that they were practically all deficient in their lime content, thus denoting acidity, a condition

which is rather unsatisfactory for cane planting. The per cent of lime ranged in these soils from 0 to 1.966 per cent, and the average content was only 0.398 per cent. This shows that there is a good opportunity to increase the tonnage of these cane soils by the application of lime in the proper way, and in the right proportions. Advice has been given in this respect to the owners of these lands.

4. Cooperative work with other members of the staff, such as analyses of new varieties of sugar cane, in the selection of new types by the plant breeder. Also some work was done to determine whether there was any difference in the glucose content of healthy and diseased canes. The analyses made did not show any difference in this respect.

Samples analyzed during the year for the determination of their ingredients were as follows:

Fertilizers.....	94	Citrus fruits.....	100
Soils.....	33	Feedstuffs.....	2
Limestone.....	3	Fungicides.....	3
Rocks.....	6	Water.....	1
Canes.....	247		
Molasses.....	1	Total.....	490

*Publications.*—The following publications have been put through the press during the year:

1. Report of the insular experiment station.

Contents: Report of the chief agronomist on the improvement of cane by cross-pollination, the selection of seedlings, and new Porto Rican cane varieties, tests of foreign seedling-cane varieties, plant accessions, improvement of vegetables, breeding of tomatoes and melons, and fertilizer trials inside and outside the station. An exposition of the work conducted in connection with the distribution and nature of the mottling disease of cane, and recommendations for its control, and brief reports of progress on citrus diseases, vegetable diseases, and other plants, by the chief pathologist. Report of the chief entomologist on plant inspection, fumigation, and quarantine and results of investigations on insects plagues of tobacco and citrus. Report of the chief chemist on the 1,020 analyses made during the year and the results of an investigation into what constitutes ripe grapefruit and the influence of certain factors in the process of ripening.

2. Journal of the Department of Agriculture, Volume I, No. 3.

Contents: A method of identification and description of sugar-cane varieties, and its application to types in Porto Rico. The white grubs injuring sugar cane in Porto Rico. Life histories of May-beetles (continued). The eggplant lace bug in Porto Rico. Life history of *Helice jamaicensis*, Fab. Scale-feeding habits of a Porto Rican millipede.

3. Volume I, No. 4.

Contents: Sugar-cane fungi and diseases of Porto Rico.

4. Volume II, No. 1.

Contents: Experimental work on the control of the white grubs of Porto Rico. The green muscardine fungus in Porto Rico. Studies in inheritance in sugar cane.

5. Volume II, No. 2.

Contents: Citrus diseases of Porto Rico.

6. Revista de Agricultura del Departamento de Agricultura y Trabajo, Volume I, Nos. 1 and 2, and Volume I, No. 3.

7. Circulars.

No. 9. Las Queresas y Como Combatirlas.

No. 10. Wood Rot of Citrus Trees. Podumbre de la Madera de los Cítricos.

No. 11. La Nueva Enfermedad de la Caña.

No. 12. Medios para Combatir los Gusanos Blancos.

No. 13. The Preparation and Use of Lime Sulphur.

8. Bulletins.

No. 17. Citrus Scab in Porto Rico.

9. Other publications.

1. Lighting Injury to Sugar Cane. In Phytopathology, Volume VII, No. 4.

2. Cane Diseases in Porto Rico. In Louisiana Planter, Volume 64, No. 5.

3. Enfermedad de la Caña en Puerto Rico. In El Mundo Azucarero, Volume V, No. 1.

4. An Epiphytotic of Cane Disease in Porto Rico. In Phytopathology, Volume VII, No. 6.

5. Diseases of Sugar Cane. In Tropical and Subtropical America, especially in the West Indies. In West Indian Bulletin, Volume 16, No. 4.

10. Press notices.

1. Abonos y la Enfermedad del Matizado de la Caña.

2. La Enfermedad Nueva de la Caña y la Yerba Malojillo.

3. The Mosaic Disease of Tobacco.

4. Sobre la Flora de Puerto Rico.

5. Sobre la Enfermedad del Matizado de la Caña.

6. Puntos en la Enfermedad de la Caña.

7. Medios para Combatir el Matizado de la Caña.
8. The Experiment Station and the Mottling Disease of Sugar Cane.
9. La Cuarentena de las Plantas.
10. A Catalogue of the Fungus and Non-parasitic Diseases Attacking the Economic Plants of Porto Rico.

## LABOR.

## LABOR CONDITIONS IN THE ISLAND.

The hostility between capital and labor has been accentuated during the last fiscal year, especially in the sugar and tobacco sections of the island, due on the one hand to the propaganda of a small group of labor leaders, which increases relatively and acts within politics in many of the municipalities, and on the other hand to the lack of wish on the part of quite a number of employers to recognize the legitimate aspiration of laborers for bettering their present economic conditions.

The bureau of labor has devoted a great part of its activities and influence to destroy such antagonism between capital and labor. All its efforts have been made within the reduced limits of the means and powers conferred upon it by law.

The sanitary conditions of factories and workshops, as well as of the large tenement houses where the majority of the laborers are compelled to live, due to the lack of proper buildings, remain just the same as described in our special bulletin on "Housing Conditions," published in 1914, only with the aggravating difference that house rents have increased from 25 to 50 per cent.

The bureau has reported to the department of sanitation 164 establishments which, at the time the regular inspection was made, were found to be a menace to the health of the laborers employed therein, in spite of the previous suggestions of the bureau and regardless of the provisions of the law. Many factories and small shops were not reported because of the prompt and proper repairs made by the employers. There is also about a dozen factories and workshops that in matters of sanitation make such a perfect show that can be as models in Porto Rico.

In the urban zone generally, with exception of the laborers employed in the tobacco factories and in the construction of buildings, wages are on the same level as last year.

Artisans, mechanics, and their helpers at the larger towns, as well as cigarmakers and other kind of laborers employed in the tobacco industry all over the island, have had an increase in their salaries of from 10 to 30 per cent.

In rural zones changes have taken place in the salaries of the agricultural laborers. In looking over hundreds of pay rolls of different employers and data furnished by the laborers themselves personally, the conclusion has been reached that the largest number of unskilled laborers working by the day in the sugar sections who earned from 60 to 90 cents per day during the dull season have had an increase in their wages of from 80 cents to \$1.15 per day when the grinding season began. A large majority of these laborers who worked by the piece earned during the grinding season according to their own statements, which were confirmed by this bureau on examining the pay rolls, wages ranging from \$1 to \$1.75 per day.

Nevertheless, the officials of the bureau of labor gathered information in regard to the employers in the districts of Aguadilla, Mayaguez, Ponce, and Guayama, and found out that said employers, as far as the aforementioned industry was concerned, taking into account the excess of laborers existing in their vicinity, did not raise at all the wages of their laborers. As per data filed in the office of the bureau there were agricultural laborers in Anasco, Aguada, Aguadilla, Morovis, Rincon, Camuy, San Sebastian, Manati, and Juncos who were earning the same wages that were paid to minors and women in other localities.

There were several sugar factories which, in addition to the wages paid, granted the laborers a 15 per cent bonus, which was paid after the grinding season ended.

Salaries of laborers in fruit and tobacco plantations have been increased generally from 5 to 25 per cent. Wages of employees in coffee districts remain the same as reported by this bureau five years ago, as refer to men in the cultivation and picking and women in the assorting of the red berry.

The cost of living, because of the great increase in the prices of foodstuffs and clothing, is a matter which deserves serious consideration. The food commission, most successfully, has taken very opportune measures within its powers to establish the maximum price of articles of prime necessity, but no measures have been adopted in regard to dry goods retail stores, pharmacies, and other establishments where laborers find themselves compelled to go in cases of unavoidable need. In this connection the bureau is collecting data to prepare a complete memorandum and submit it to the next legislative assembly.

A table is hereto attached showing four types of salaries that prevailed during the year in the cane-sugar regions, the data for which were taken shortly after the grinding season began.

## LABOR DISPUTES.

A table is herewith accompanied showing the strikes reported during the fiscal year. In some of those strikes the cooperation of the bureau of labor was refused by some of the labor leaders, but nevertheless the officials of the bureau, under precise instructions to work for the reestablishment of industrial peace in each and all cases, did everything in their power to bring the contending parties together for the purpose of friendly discussing the points at issue.

In a large number of cases, the employers refused to meet the labor leaders. The former complained on many occasions that the petitions had been submitted by the latter at the time of or after their going into strike; that because of the aggressive language used by the agitators at their meetings as well as other public demonstrations, they preferred to bring laborers from other parts of the island at any price to substitute the strikers; and that the demands made were systematic and unjustified.

The laborers, on the other hand, showed no disposition to meet the employers with the exclusion of the labor agitators or to exclude them at all elsewhere.

Even in spite of the deplorable attitude adopted by employers and strikers, it is the bureau's strong conviction that all strikes could have been at any time settled and industrial peace newly established, had interference by parties outside of the laborers been excluded. The bureau of labor became convinced that both, employers and strikers, in almost all the strike controversies that were not satisfactorily settled, were moved by a spirit of conciliation. But because of the lack of legal power to officially intervene in all the controversies of an industrial character of which we had knowledge, and authority to have contracts complied with by the parties thereto, it is impossible for the bureau to be fully successful in its work, in spite of the efforts made and expenses incurred therefor.

## ENFORCEMENT OF LABOR LAWS.

In enforcing the labor laws, the bureau of labor met with great difficulties due to the lack of personnel and power to summon witnesses and examine books and records.

The law regulating the employment of women and children should be amended in accordance with recommendations previously made. Otherwise, the proper enforcement of said law is quite difficult. Women and the parents of children employed side at present so decidedly with their employers when the latter are prosecuted for violations of the law referred to, that unless more adequate means for its enforcement are provided, its fundamental principles disappear.

As to the scaffold law, the bureau has devoted to its enforcement a great part of the time it gives to its activities. The amendment approved December 1, 1917, fixing \$25 as the minimum of fine for any violation, has rendered satisfactory results.

The old number of accidents by reason of wrong scaffolding system has decreased in 90 per cent. In many instances, employers have stated their readiness to cooperate in the proper enforcement of the law. Most of employers in building construction realize that the measures covered by said amendment have been beneficial to all parties concerned.

In regard to the investigations made in compliance with the workmen compensation act, the table hereto attached is self-explanatory as to the work done. A large number of municipalities, including their rural sections, were visited for the purpose of investigating 504 accidents reported. In most cases, because of the unknown residence of the witnesses and the lack of transportation facilities, the inspectors were compelled to remain in the country or walk a number of miles. Special attention was always paid to the needs of the injured and their dependents.

As respects the act entitled "An act to determine certain duties of employers in cases of strikes," approved April 12, 1917, but one complaint was reported. The bureau made 17 denouncements against an employer and his agents who, according to the evidence gathered, appeared responsible for violations of said act. The employer was declared not guilty; the agents were sentenced by the municipal court where the prosecutions were filed to a fine of \$25 each; and all cases having been appealed were finally acquitted.

On November 14, 1917, an act to determine the procedure in cases of claims for wages by farm laborers against their employers, effective 90 days after its approval, was approved. In accordance with section 2 of said act, the commissioner of agriculture and labor may intervene in the proceedings through any of the employees under him. Four cases were filed. The law does not specify the extent of the intervention given to the commissioner. This is found to be a great difficulty in attending to the cases reported. Nevertheless, the chief of the bureau of labor, by direction of the commissioner, has appeared before the municipal court in two municipalities,

representing the plaintiff. In one of these cases judgment was rendered in favor of the plaintiff. In the other case, the decision of the court was in favor of the defendant and it is now pending at a superior court on appeal filed by the chief of the bureau. The department intervenes through its personnel in important cases, and in minor cases proper instructions are given to the interested parties for claiming their rights.

#### PUBLICATIONS.

A bulletin has been prepared for publication.

This pamphlet contains the most approximate number of strikes that occurred during the eleven months ending May 30, and a clear explanation of the results thereof.

#### FREE EMPLOYMENT AGENCY.

Due to the conscription of men between the ages of 21 and 31 for military service, there has not been the regular number of male applicants for positions as formerly had.

However, the number of recommendations, as may be noticed in the accompanying table, for positions left vacant by men called to the colors, shows that the work done in the office and the investigations usually made before the applicants are recommended, were as important as those made last year.

Besides, there was established in San Juan a few months ago an employment office under the United States department of labor, for the purpose of registering laborers of both sexes to be taken to the United States and give them jobs in the industries essential to winning the war and, consequently, a large number of applicants for positions of some importance and those persons who have no permanent employment apply to said office stating their desire to go to the United States expecting there to get better salaries and improve their living conditions.

For several years, the necessary means to develop the activities of the agency have been insistently requested, and such request is once more insisted upon, all the more so when the fact is borne in mind that thousands of men will soon be called to service in the National Army and, consequently, the lack of laborers will require more than ever the work of the agency for preventing immigration and for the benefit of the existing industries and the laborers as well.

Up to the present an employee who has other clerical work to perform has been in charge of the full management of the agency at the office of the bureau in San Juan.

Due to the lack of personnel and funds it has been impossible to establish branches in other towns where employers and applicants who could not come to the San Juan office might go when necessary.

#### RECOMMENDATIONS.

As stated in previous reports there are few effective labor laws in proportion to the many and important labor problems requiring attention by the legislature.

The following legislation is urgently recommended:

(a) An amendment to the present law regulating the work of women and children, providing adequate means of enforcement.

At present, time and money are expended and the law is being violated in many cases, it being almost impossible to prove such violations. The classes of work that are exempted in the law deserve also revision, and the employment of children in agricultural work should be subject to certain restrictions.

(b) An amendment to the law establishing the bureau of labor, so that the bureau might be able to enforce the labor laws by means of power to summon witnesses and take sworn declarations in compliance with all labor laws; to examine books and records necessary for such purpose, and to appear and be heard in prosecutions for violations of said laws.

(c) An act providing that in any public or private contract the bondsmen for the contractor or any immovable property of the latter shall be responsible for the payment in full of the salaries of the laborers, no matter what the liabilities of the contractor may be.

(d) A law fixing a minimum wage for women.

(e) A law providing safety appliances for factories.

(f) A law creating a board of conciliation and arbitration to settle strikes and labor disputes.

Respectfully,

M. CAMUÑAS,  
*Commissioner of the Department of Agriculture and Labor.*

The honorable the GOVERNOR OF PORTO RICO,  
San Juan, P. R.

Table showing strikes from July 1, 1917, to June 30, 1918.

Occupation.	District or town.	Approximate number of strikers.	Results.
Agricultural workers.....	Aguada.....	50	Failed.
Do.....	Aguas Buenas.....	60	(1)
Do.....	Arecibo.....	1,000	Failed. <sup>2</sup>
Do.....	Arroyo.....	500	Salaries increased to laborers working in place of strikers.
Do.....	Barceloneta.....	300	Failed.
Do.....	Canovanas.....	200	Do.
Do.....	Carolina.....	400	Do.
Do.....	Fajardo.....	2,000	Salaries increased to laborers working in place of strikers.
Do.....	Guayama.....	1,200	Do.
Do.....	Gurabo.....	295	Wages increased slightly.
Do.....	Humacao.....	500	20 per cent increase in wages.
Do.....	Luquillo.....	300	Salaries increased to laborers working in place of strikers.
Do.....	Mameyes.....	200	Do.
Do.....	Naguabo.....	1,000	Do.
Do.....	Patillas.....	600	Do.
Do.....	Peñuelas.....	80	Failed.
Do.....	Rincon.....	25	Do.
Do.....	Rio Grande.....	500	Do.
Do.....	Vega Alta.....	600	Do.
Do.....	Vega Baja.....	250	25 per cent increase in wages.
Bakers.....	Peñuelas.....	30	56 per cent increase in wages.
Do.....	Ponce.....	200	35 per cent increase in wages.
Cigarmakers.....	Aguas Buenas.....	305	(1)
Do.....	Bayamon.....	912	(1)
Do.....	Caguas.....	80	(1)
Do.....	Cayey.....	265	(1)
Do.....	Cidra.....	139	(1)
Do.....	Juana Diaz.....	80	Unknown.
Do.....	Manati.....	353	(1)
Do.....	Mayaguez.....	115	Increase of \$1 and of \$0.50 in all sizes of cigars.
Do.....	Peñuelas.....	80	(1)
Do.....	Ponce.....	340	(1)
Do.....	San Juan.....	1,227	(1)
Do.....	San Lorenzo.....	284	(1)
Do.....	Toa Alta.....	25	Increase in wages of 15 to 20 per cent.
Do.....	Utua.....	100	(1)
Motormen and conductors of electric cars.....	San Juan.....	155	Material conditions improved. No increase in wages.
Printers.....	Arecibo.....	5	Increase from 20 to 30 per cent in wages.
Street sweepers.....	San Juan.....	60	Wages increased.
Strippers.....	Aguas Buenas.....	37	(1)
Do.....	Arecibo.....	75	Increase of 33½ per cent in wages.
Do.....	Barceloneta.....	67	25 per cent increase in wages.
Do.....	Bayamon.....	137	(1)
Do.....	Bayamon (Cataño).....	225	Salaries increased.
Do.....	.....do.....	225	Petition not granted.
Do.....	Caguas.....	268	Less pounds in standard weight.
Do.....	.....do.....	550	Salaries increased.
Do.....	.....do.....	82	Do.
Do.....	Cayey.....	18	(1)
Do.....	Cidra.....	10	(1)
Do.....	Coamo.....	25	(1)
Do.....	Juncos.....	106	Failed.
Do.....	Manati.....	221	(1)
Do.....	Morovis.....	130	40 per cent increase in wages.
Do.....	Naranjito.....	87	Increase of 2 cents per pound.
Do.....	Peñuelas.....	46	(1)
Do.....	Ponce.....	375	(1)
Do.....	San Juan.....	558	(1)
Do.....	San Lorenzo.....	151	Failed.
Do.....	.....do.....	95	(1)
Do.....	Toa Alta.....	40	12½ per cent increase in wages.
Shoemaker.....	Mayaguez.....	50	Small increase in wages.
Do.....	Ponce.....	50	10 per cent increase in wages.
Tailor.....	San Juan.....	6	Failed.
Workers in locomotive engines.....	Barceloneta.....	32	30 per cent increase in wages.
Workers in tobacco industry (besides cigarmakers and strippers).....	Bayamon.....	297	(1)
Do.....	Cayey.....	68	(1)
Do.....	Cidra.....	46	(1)
Do.....	Manati.....	154	(1)
Do.....	San Juan.....	1,366	(1)
Do.....	San Lorenzo.....	35	(1)

<sup>1</sup> According to investigations made, we found that conditions in general were improved.<sup>2</sup> Strikers returned to their tasks without increase in their salaries or any change as to the conditions in which they worked when the strike was begun.

Table showing strikes from July 1, 1917, to June 30, 1918—Continued.

Occupation.	District or town.	Approximate number of strikers.	Results.
Workers in sugar-cane factories.	Barceloneta.....	200	25 per cent increase in wages.
Do.....	Caguas.....	70	Increase of 20 cents to all.
Do.....	Carolina.....	80	Failed.
Workers, building construction.	San Juan.....	125	Increase of 2 cents per hour.
Do.....	.....do.....	60	Readmission of laborers withdrawn.

Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Adjuntas.....	Coffee selection and mill.....	2	2
Do.....	Bakeries.....	3	3
Do.....	Tailoring shops.....	1	1
Do.....	Shoemaking shops.....	1	1
Do.....	Electric plants.....	1	1
Aguada.....	Cigar factory.....	2	4
Do.....	Tailoring shops.....	1	2
Aguadilla.....	Bakeries.....	6	13
Do.....	Shoemaking shops.....	3	6
Do.....	Cigar factories.....	5	26
Do.....	Preparation of fruits for exportation.....	2	3
Do.....	Coffee selection and mill.....	1	6
Do.....	Hat-cleaning shops.....	2	2
Do.....	Manufacture of straw goods.....	1	1
Do.....	Belt-making shops.....	1	2
Do.....	Saw pits.....	1	1
Do.....	Manufacture of trunks.....	1	1
Do.....	Stripping shops.....	2	4
Do.....	Tailoring shops.....	2	2
Do.....	Barber shops.....	2	2
Do.....	Manufacture of mattresses.....	1	1
Do.....	Engine repairing shops.....	1	1
Do.....	Carpenter shops.....	1	1
Do.....	Ice factories.....	1	1
Do.....	Dry goods stores.....	3	6
Aguas Buenas.....	Stripping shops.....	1	2
Do.....	Tobacco selections.....	1	2
Do.....	Shoemaking shops.....	6	11
Do.....	Cigar factories.....	4	8
Do.....	Barber shops.....	1	1
Do.....	Bakeries.....	1	2
Aibonito.....	Cigar factories.....	5	6
Do.....	Hat-cleaning shops.....	1	1
Do.....	Shoemaking shops.....	2	4
Do.....	Bakeries.....	2	2
Do.....	Laundries.....	1	1
Do.....	Tobacco selections.....	1	1
Do.....	Dry goods stores.....	3	3
Do.....	Barber shops.....	1	3
Anasco.....	Cigar factories.....	3	6
Do.....	Bakeries.....	1	2
Do.....	Coffee selection and mill.....	3	6
Do.....	Shoemaking shops.....	3	3
Do.....	Corn mills.....	1	1
Do.....	Barber shops.....	4	8
Do.....	Tailoring shops.....	2	4
Do.....	Sewing shops.....	1	2
Do.....	Dry goods stores.....	2	2
Do.....	Ice factories.....	1	1
Arecibo.....	Stripping shops.....	4	2
Do.....	Cigar factories.....	2	6
Do.....	Manufacture of mattresses.....	1	1
Do.....	Watch-repairing shops.....	2	2
Do.....	Barber shops.....	11	36
Do.....	Laundries.....	2	2
Do.....	Shoemaking shops.....	17	34
Do.....	Carpenter shops.....	2	2



Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918—Continued.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Arecibo	Ice factories	1	1
Do.	Coffee selection and mill	2	6
Do.	Soda-water factories	1	1
Do.	Printing shops	4	8
Do.	Bay-rum factories	1	1
Do.	Tailoring shops	5	10
Do.	Hat-cleaning shops	2	6
Do.	Hat factories	1	3
Do.	Dry goods stores	2	4
Do.	Blacksmith shops	2	2
Do.	Sewing shops	2	4
Do.	Bakeries	3	6
Do.	Confectionary shops	1	1
Arroyo	Barber shops	3	6
Do.	Shoemaking shops	5	10
Do.	Bakeries	1	2
Barceloneta	Stripping shops	5	18
Do.	Cigar factories	3	6
Do.	Confectionary shops	1	1
Do.	Bakeries	3	6
Do.	Sewing shops	2	4
Do.	Tailoring shops	2	4
Do.	Barber shops	3	6
Do.	Shoemaking shops	2	4
Do.	Hat-cleaning shops	1	1
Barranquitas	Sewing shops	1	1
Do.	Shoemaking shops	2	4
Do.	Bakeries	1	2
Do.	Barber shops	1	1
Barros	Tailoring shops	1	2
Do.	Cigar factories	2	4
Do.	Bakeries	1	2
Do.	Shoemaking shops	2	4
Do.	Barber shops	1	2
Do.	Sewing shops	2	2
Bayamon	do	8	12
Do.	Stripping shops	1	5
Do.	Cigar factories	5	12
Do.	Barber shops	7	7
Do.	Shoemaking shops	10	10
Do.	Hat-cleaning shops	2	2
Do.	Watch-repairing shops	1	1
Do.	Tailoring shops	7	7
Do.	Carpenter shops	1	1
Do.	Bakeries	3	3
Do.	Blacksmith shops	1	1
Cabo Rojo	Shoemaking shops	5	5
Do.	Hat-cleaning shops	3	3
Do.	Tailoring shops	3	3
Do.	Carpenter shops	1	1
Do.	Bakeries	2	3
Do.	Cigar factories	10	15
Do.	Printing shops	2	2
Do.	Sliversmith shops	1	1
Do.	Barber shops	3	3
Caguas	Manufacture of liquors	1	1
Do.	Tobacco selections	4	12
Do.	Barber shops	16	16
Do.	Printing shops	3	6
Do.	Tailoring shops	16	16
Do.	Engine repairing shops	1	1
Do.	Blacksmith shops	2	2
Do.	Laundries	2	2
Do.	Soda-water factories	2	4
Do.	Shoemaking shops	18	27
Do.	Carpenter shops	2	2
Do.	Cigar factories	15	45
Do.	Bakeries	5	15
Do.	Hat-cleaning shops	5	5
Do.	Sewing shops	14	28
Do.	Stripping shops	15	54
Do.	Dry-goods stores	3	3
Camuy	Stripping shops	1	2
Do.	Tailoring shops	2	2
Do.	Confectionery shops	1	2
Do.	Hat-cleaning shops	1	2
Do.	Bakeries	1	4
Do.	Barber shops	3	5
Do.	Cigar factories	2	4

Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918—Continued.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Canovanas.....	Shoemaking shops.....	1	1
Do.....	Bakeries.....	1	1
Do.....	Cigar factories.....	1	1
Do.....	Barber shops.....	2	2
Do.....	Tailoring shops.....	2	2
Carolina.....	Cigar factories.....	2	4
Do.....	Sewing shops.....	1	2
Do.....	Bakeries.....	2	2
Do.....	Barber shops.....	3	3
Do.....	Tailoring shops.....	3	3
Do.....	Shoemaking shops.....	5	5
Cayey.....	Manufacture of trunks.....	1	1
Do.....	Tailoring shops.....	4	4
Do.....	Shoemaking shops.....	9	12
Do.....	Tobacco selections.....	1	8
Do.....	Stripping shops.....	5	15
Do.....	Hat-cleaning shops.....	2	4
Do.....	Confectionery.....	1	2
Do.....	Blacksmith shops.....	2	2
Do.....	Bakeries.....	1	2
Do.....	Electric plants.....	1	6
Do.....	Coffee selection and mill.....	3	1
Do.....	Printing shops.....	1	4
Do.....	Barber shops.....	4	1
Do.....	Cigar factories.....	10	15
Do.....	Sewing shops.....	12	12
Do.....	Ice factories.....	2	2
Celba.....	Shoemaking shops.....	2	2
Do.....	Barber shops.....	3	3
Coamo.....	Hat-cleaning shops.....	2	2
Do.....	Cabinet makers.....	1	1
Do.....	Shoemaking shops.....	4	9
Do.....	Coffee selection and mill.....	6	10
Do.....	Bakeries.....	1	1
Do.....	Barber shops.....	2	2
Comerio.....	Electric plants.....	1	1
Do.....	Carpenter shops.....	1	1
Do.....	Sewing shops.....	4	4
Do.....	Tailoring shops.....	1	1
Do.....	Bakeries.....	3	6
Do.....	Cigar factories.....	2	2
Do.....	Barber shops.....	3	3
Do.....	Stripping shops.....	1	1
Do.....	Shoemaking shops.....	4	4
Do.....	Carpenter shops.....	1	1
Do.....	Tobacco selections.....	1	2
Ciales.....	Coffee selections and mills.....	2	4
Do.....	Cigar factories.....	2	4
Do.....	Sewing shops.....	1	2
Do.....	Barber shops.....	2	4
Do.....	Hat-cleaning shops.....	2	2
Do.....	Shoemaking shops.....	7	9
Do.....	Tailoring shops.....	2	2
Cidra.....	Cigar factories.....	1	1
Do.....	Barber shops.....	2	2
Do.....	Stripping shops.....	1	1
Do.....	Bakeries.....	2	2
Do.....	Confectionery.....	1	1
Do.....	Shoemaking shops.....	3	3
Corozal.....	Preparation of molasses (melao).....	2	2
Do.....	Bakeries.....	2	2
Do.....	Cigar factories.....	1	1
Do.....	Shoemaking shops.....	2	2
Do.....	Barber shops.....	2	2
Do.....	Coffee selections and mill.....	1	1
Do.....	Stripping shops.....	1	2
Dorado.....	Shoemaking shops.....	2	2
Do.....	Bakeries.....	1	1
Do.....	Barber shops.....	1	1
Do.....	Cigar factories.....	2	2
Do.....	Sewing shops.....	1	1
Fajardo.....	Barber shops.....	10	10
Do.....	Bakeries.....	4	6
Do.....	Shoemaking shops.....	8	12
Do.....	Sewing shops.....	2	4
Do.....	Ice factories.....	1	2
Do.....	Carpenter shops.....	1	2
Do.....	Blacksmith shops.....	2	2

Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918—Continued.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Fajardo	Cigar factories	6	16
Do	Hat-cleaning shops	1	1
Do	Tailoring shops	1	1
Guayama	Cigar factories	9	14
Do	Ice factories	2	2
Do	Confectionery	1	1
Do	Carpenter shops	1	1
Do	Bay rum factories	1	1
Do	Belt-making shops	1	1
Do	Bakeries	2	6
Do	Tailoring shops	1	2
Do	Hat-cleaning shops	2	3
Do	Shoemaking shops	4	7
Do	Barber shops	8	10
Do	Sewing shops	2	3
Do	Stripping shops		
Do	Printing shops	2	2
Do	Manufacture of liquors	4	4
Do	Blacksmith shops	1	1
Do	Garages	2	2
Do	Vermicelli factories	2	4
Guaynabo	Cigar factories	1	1
Do	Bakeries	2	2
Do	Shoemaking shops	2	2
Do	Hat-cleaning shops	1	1
Do	Barber shops	1	1
Gurabo	Stripping shops	3	6
Do	Shoemaking shops	3	6
Do	Tobacco selections	1	4
Do	Cigar factories	4	8
Do	Barber shops	3	3
Do	Bakeries	1	1
Hatillo	Shoemaking shops	3	5
Do	Cigar factories	1	2
Do	Bakeries	2	5
Do	Barber shops	1	1
Do	Stripping shops	1	2
Hormigueros	Cigar factories	2	2
Do	Bakeries	2	2
Humacao	do	4	8
Do	Shoemaking shops	5	7
Do	Dry goods stores	7	7
Do	Cigar factories	7	14
Do	Sewing shops	12	24
Do	Barber shops	12	12
Do	Tailoring shops	2	2
Do	Blacksmith shops	1	1
Do	Hat cleaning shops	1	1
Do	Carpenter shops	1	1
Do	Ice factories	1	1
Do	Printing shops	2	2
Isabela	Confectioneries	1	2
Do	Shoemaking shops	4	6
Do	Tailoring shops	2	2
Do	Stripping shops	3	6
Do	Cigar factories	1	1
Do	Bakeries	2	4
Do	Watch repairing shops	1	1
Do	Barber shops	2	2
Do	Hat cleaning shops	1	1
Juana Diaz	Bakeries	3	3
Do	Shoemaking shops	3	3
Do	Barber shops	2	2
Do	Hat cleaning shops	1	1
Do	Cigar factories	2	2
Do	Stripping shops	1	1
Juncos	Cigar factories	3	7
Do	Tobacco selections	5	8
Do	Shoemaking shops	7	8
Do	Sewing shops	3	5
Do	Bakeries	2	3
Do	Barber shops	6	7
Do	Stripping shops	5	15
Lajas	Shoemaking shops	2	2
Do	Barber shops	2	2
Do	Tailoring shops	1	1
Do	Bakeries	2	4
Do	Cigar factories	2	4
Lares	Coffee selection and mill	6	20
Do	Shoemaking shops	2	4

Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918—Continued.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Lares	Ice factories	1	1
Do.	Confectioneries	1	1
Do.	Bakeries	1	1
Do.	Barber shops	5	7
Do.	Tailoring shops	2	4
Las Piedras	Barber shops	2	2
Do.	Shoemaking shops	1	1
Do.	Cigar factories	1	1
Do.	Bakeries	1	1
Luquillo	Cigar factories	3	5
Do.	Bakeries	1	1
Do.	Shoemaking shops	3	4
Do.	Barber shops	1	1
Manati	Electric plants	1	1
Do.	Ice factories	1	1
Do.	Watch repairing shops	1	1
Do.	Carpenter shops	1	1
Do.	Tailoring shops	1	1
Do.	Hat cleaning shops	1	1
Do.	Confectioneries	1	1
Do.	Printing shops	1	1
Do.	Cigar factories	4	6
Do.	Bakeries	2	4
Do.	Shoemaking shops	6	6
Do.	Soda water factories	1	1
Do.	Barber shops	4	4
Do.	Stripping shops	9	36
Do.	Sewing shops	4	1
Maricao	Coffee selection and mill	2	2
Do.	Shoemaking shops	2	4
Do.	Bakeries	1	1
Mayaguez	Brooms factories	1	2
Do.	Dry goods stores	13	18
Do.	Stripping shops	9	9
Do.	Manufacture of liquors	2	2
Do.	Trolley car station	1	1
Do.	Tin shops	1	1
Do.	Confectioneries	1	1
Do.	Sewing shops	4	4
Do.	Printing shops	3	6
Do.	Cigar factories	11	16
Do.	Tailoring shops	15	25
Do.	Watch repairing shops	7	7
Do.	Bakeries	3	6
Do.	Hat cleaning shops	8	16
Do.	Soda water factories	1	2
Do.	Shoemaking shops	30	30
Do.	Carpenter shops	18	18
Do.	Drawn work, lace, and embroideries	4	12
Do.	Barber shops	33	33
Do.	Coffee selection and mill	6	12
Do.	Blacksmith shops	4	4
Do.	Vermicelli factories	4	4
Do.	Chocolate factories	3	7
Do.	Preparation of fruits for exportation	3	3
Do.	Belt-making shops	1	1
Do.	Bay rum factories	2	2
Do.	Brooms factories	2	2
Do.	Spring bed factories	1	1
Maunabo	Barber shops	3	3
Do.	Tailoring shops	3	3
Do.	Shoemaking shops	3	3
Do.	Cigar factories	3	3
Do.	Bakeries	2	2
Moca	Shoemaking shops	1	1
Do.	Bakeries	2	2
Morovis	Coffee selection and mill	1	1
Do.	Shoemaking shops	2	2
Do.	Bakeries	1	2
Do.	Stripping shops	6	12
Do.	Barber shops	1	1
Naguabo	Cigar factories	4	4
Do.	Barber shops	6	6
Do.	Tailoring shops	5	5
Do.	Shoemaking shops	5	5
Do.	Bakeries	4	4
Do.	Sewing shops	1	1
Naranjito	Stripping shops	1	2
Do.	Cigar factories	3	3

Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918—Continued.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Naranjito.....	Barber shops.....	1	1
Do.....	Bakeries.....	1	1
Do.....	Shoemaking shops.....	1	1
Patillas.....	Belt-making shops.....	2	3
Do.....	Shoemaking shops.....	4	5
Do.....	Cigar factories.....	3	6
Do.....	Tailoring shops.....	1	2
Do.....	Bakeries.....	2	2
Do.....	Sewing shops.....	2	2
Do.....	Barber shops.....	1	2
Penuelas.....	Stripping shops.....	1	1
Do.....	Cigar factories.....	1	1
Do.....	Bakeries.....	2	2
Ponce.....	Vermicelli factories.....	1	1
Do.....	Municipal dock.....	1	1
Do.....	Corn mills.....	2	2
Do.....	Manufacture of mattresses.....	2	2
Do.....	Drug store.....	1	1
Do.....	Manufacture of drugs.....	1	1
Do.....	Milk deposits.....	23	23
Do.....	Shoemaking shops.....	41	41
Do.....	Garages.....	5	5
Do.....	Dry-goods stores.....	8	8
Do.....	Hat-cleaning shops.....	6	6
Do.....	Hat factories.....	1	2
Do.....	Stripping shops.....	3	6
Do.....	Carpenter shops.....	13	13
Do.....	Watch-repairing shops.....	11	11
Do.....	Confectioneries.....	2	2
Do.....	Cigar factories.....	10	12
Do.....	Silvermith shops.....	5	5
Do.....	Bakeries.....	8	8
Do.....	Bay-rum factories.....	2	2
Do.....	Slipper factories.....	2	2
Do.....	Manufacture of straw goods.....	1	1
Do.....	Ice factories.....	2	2
Do.....	Soda-water factories.....	3	3
Do.....	Coffee selection and mill.....	4	7
Do.....	Drawn work, lace and embroideries shops.....	5	10
Do.....	Belt-making shops.....	7	7
Do.....	Tin shops.....	7	7
Do.....	Sewing shops.....	10	10
Do.....	Tailoring shops.....	25	25
Do.....	Barber shops.....	46	46
Do.....	Blacksmith shops.....	8	8
Do.....	Spring-beds factories.....	2	2
Do.....	Printing shops.....	8	8
Do.....	Laundries.....	13	13
Do.....	Manufacture of trunks.....	1	1
Do.....	Coffee mills.....	1	1
Do.....	Mosaic factories.....	1	1
Do.....	Salt mills.....	3	3
Do.....	Looking-glass repairing shops.....	1	1
Do.....	Piano tuner.....	1	1
Quebradillas.....	Barber shops.....	3	3
Do.....	Cigar factories.....	2	4
Do.....	Confectioneries.....	1	1
Do.....	Shoemaking shops.....	6	8
Do.....	Stripping shops.....	2	9
Do.....	Carpenter shops.....	1	1
Do.....	Hat-cleaning shops.....	2	2
Do.....	Bakeries.....	2	2
Rincon.....	do.....	1	1
Do.....	Cigar factories.....	2	4
Do.....	Hat-cleaning shops.....	1	1
Rio Grande.....	Bakeries.....	4	4
Do.....	Cigar factories.....	2	2
Do.....	Shoemaking shops.....	5	7
Do.....	Barber shops.....	4	4
Rio Piedras.....	Cigar factories.....	3	6
Do.....	Sewing shops.....	2	2
Do.....	Bakeries.....	3	7
Do.....	Underwear factories.....	1	5
Do.....	Vermicelli factories.....	1	2
Do.....	Silversmith shops.....	2	2
Do.....	Barber shops.....	5	5
Do.....	Stripping shops.....	1	3
Do.....	Shoemaking shops.....	8	6

Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918—Continued.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Rio Piedras	Tailoring shops	4	4
Do	Laundries	1	1
Do	Confectioneries	1	1
Do	Stone quarries	1	1
San German	Dry-goods stores	2	2
Do	Shoemaking shops	2	2
Do	Corn mills	3	3
Do	Vermicelli factories	1	1
Do	Stripping shops	1	1
Do	Cigar factories	3	6
Do	Blacksmith shops	1	1
Do	Bakeries	2	2
Do	Barber shops	7	7
Do	Printing shops	2	2
Do	Hat-cleaning shops	3	4
Do	Tailoring shops	3	4
Do	Electric plants	1	1
Do	Garages	1	1
San Lorenzo	Sewing shops	1	1
Do	Cigar factories	5	5
Do	Confectioneries	1	1
Do	Shoemaking shops	4	4
Do	Barber shops	4	4
Do	Blacksmith shops	1	1
Do	Tailoring shops	1	1
Do	Stripping shops	5	10
Do	Printing shops	1	3
Do	Tobacco deposits	3	9
Do	Bakeries	1	1
San Sebastian	Tailoring shops	2	2
Do	Coffee selection and mill	3	3
Do	Shoemaking shops	4	5
Do	Barber shops	2	3
Do	Confectioneries	1	1
Do	Bakeries	1	3
Do	Blacksmith shops	1	1
Do	Corn mills	1	1
San Juan	Breweries	1	3
Do	Manufacture of mattresses	2	3
Do	Trunk factories	1	5
Do	Painting shops	1	2
Do	Fertilizer factories	2	3
Do	Foundries	2	8
Do	Brick factories	1	2
Do	Underware factories	1	2
Do	Gas deposits	1	2
Do	Manufacture of liquors	3	6
Do	Tanneries	1	2
Do	Ice factories	2	4
Do	Soda water factories	3	6
Do	Coffee mills	2	4
Do	Mosaic factories	3	6
Do	Stone quarries	2	10
Do	Docks	5	10
Do	Laundries	13	39
Do	Stripping shops	8	40
Do	Boot black shops	10	26
Do	Iron work shops	5	5
Do	Cigarette factories	2	10
Do	Confectioneries	5	9
Do	Cigar factories	7	36
Do	Tin shops	4	4
Do	Printing shops	13	33
Do	Shoemaking shops	38	38
Do	Tailoring shops	22	22
Do	Hat cleaning shops	6	6
Do	Hat factories	2	6
Do	Bakeries	10	16
Do	Barber shops	48	48
Do	Carpenter shops	12	12
Do	Sewing shops	20	57
Do	Garages	7	7
Do	Silversmith shops	10	10
Do	Dry goods stores	39	78
Do	Blacksmith shops	5	5
Do	Bay rum factories	3	8
Do	Watch repairing shops	11	11
Do	Cigar box factories	1	3

Table showing inspections made in industrial establishments from July 1, 1917, to June 30, 1918—Continued.

Towns.	Establishments.		Number of inspections made.
	Kinds.	Number.	
Toa Alta	Bakeries	2	2
Do.	Stripping shops	1	4
Do.	Cigar factories	4	8
Do.	Barber shops	4	4
Do.	Shoemaking shops	2	2
Toa Baja	do.	2	2
Do.	Bakeries	1	1
Do.	Barber shops	1	1
Do.	Cigar factories	1	2
Uyudo	Tailoring shops	2	2
Do.	Coffee selection and mill	2	2
Do.	Barber shops	4	4
Do.	Shoemaking shops	3	3
Do.	Hat cleaning shops	1	1
Do.	Stripping shops	2	4
Do.	Cigar factories	3	6
Do.	Bakeries	2	2
Do.	Confectioneries	1	1
Do.	Brick factories	1	1
Vega Alta	Shoemaking shops	2	2
Do.	Stripping shops	3	3
Do.	Bakeries	1	1
Do.	Cigar factories	3	3
Do.	Barber shops	3	3
Vega Baja	do.	5	5
Do.	Cigar factories	2	2
Do.	Sewing shops	3	3
Do.	Bakeries	2	2
Do.	Shoemaking shops	4	4
Do.	Stripping shops	2	6
Vieques	Bakeries	2	2
Do.	Cigar factories	2	2
Do.	Soda water factories	1	1
Do.	Ice factories	1	1
Yabucoa	Cigar factories	3	3
Do.	Barber shops	5	5
Do.	Belt-making shops	1	1
Do.	Shoemaking shops	3	3
Do.	Bakeries	1	1
Yauco	Soda water factories	1	1
Do.	Vermicelli factories	1	1
Do.	Hat cleaning shops	1	1
Do.	Electric plants	1	1
Do.	Printing shops	1	1
Do.	Coffee selection and mill	2	2
Do.	Bakeries	3	6
Do.	Cigar factories	5	10
Do.	Barber shops	2	2
Do.	Shoemaking shops	3	3

Several municipalities have been omitted in the above table, because of the lack of time, personnel and funds to cover the island in the time required without injury to other duties. The data initiated therein will be completed in our next report.

It is our purpose to investigate the total number of employees in every industry or establishment, small shop included, operating all over the island and to ascertain the social relation that might exist between employers and employees in every particular case; also the economic principles which prevail.

We submit these figures as evidence of an inaugural effort to the end already explained.

Table showing four types of salaries that prevailed in agricultural work in sugar-cane zone during crop season, 1918.

Town.	Wages per day.			
	\$0.40	\$0.55	\$0.75	\$1.50
Aguada.....	.60	.70	.80	.80
Anasco.....	.65	.70	.85	1.00
Arecibo.....	1.50	.75	.80	1.25
Barceloneta.....	1.50	.60	.75	1.00
Caguas.....	.75	.80	.90	1.15
Camuy.....	1.40	.50	.55	.60
Canovanas.....	.60	1.00	1.25	1.50
Cayey.....	.70	.80	.90	1.00
Carolina.....	1.10	1.15	1.20	1.25
Fajardo.....	.90	1.00	1.25	1.50
Humacao.....	.70	.90	1.00	1.25
Juana Diaz.....	1.50	.87	1.00	1.10
Juncos.....	1.40	.70	.75	1.12
Las Piedras.....	.60	.70	.80	1.15
Loiza.....	.90	1.00	1.10	1.25
Luquillo.....	.90	1.00	1.12	1.25
Manati.....	1.33	.84	.99	1.34
Maunabo.....	.55	.65	.70	.87
Mayaguez.....	.60	.70	.80	.90
Morovis.....	1.35	.50	.55	.60
Naguabo.....	1.00	1.25	1.30	1.50
Rio Grande.....	1.00	1.15	1.25	1.50
Rio Piedras.....	.90	1.10	1.15	1.25
Salinas.....	.87	.90	1.00	1.25
San Lorenzo.....	.70	.80	.90	1.00
San Sebastian.....	1.40	.45	.55	.60
Toa Baja.....	.75	.90	1.15	1.25
Vieques.....	.90	1.00	1.25	1.50
Vega Baja.....	.80	.90	1.00	1.10
Yabucoa.....	.80	1.00	1.15	1.25
Yauco.....	.75	.80	1.00	1.25

<sup>1</sup> Salaries regularly paid to minors, old men, and weak people.<sup>2</sup> Salaries on cane farms in coffee section, where lower scale of wages prevails.

Table showing the work accomplished in connection with the scaffold law from July 1, 1917, to June 30, 1918.

Towns.	Number of constructions.	Total inspections.	Works suspended until scaffold corrected.	Denounced.	Scaffolds approved.
Aguadilla.....	20	20	4		16
Agua Buenas.....	1	1	1		
Arecibo.....	16	16	3		13
Barceloneta.....	5	5			5
Bayamon.....	5	5	1		4
Cabo Rojo.....	8	8	3		5
Caguas.....	26	28	7		21
Camuy.....	1	1			1
Carolina.....	1	1	1		
Cayey.....	6	6			6
Ciales.....	1	1			1
Cidra.....	1	1			1
Comerio.....	2	2	1		1
Guayama.....	1	1	1		
Guabo.....	1	1	1		
Humacao.....	3	3			3
Juncos.....	2	2	1		1
Lares.....	3	3	2		1
Manati.....	3	3	3		
Mayaguez.....	7	7	2		5
Ponce.....	23	23	8		15
Rincon.....	3	3	2		1
Rio Grande.....	2	2	2		2
Rio Piedras.....	4	4	3		1
San Juan (city).....	75	82	22	1	60
San Juan (Puerta de Tierra).....	11	11	3	3	8
San Juan (Santurce).....	32	32	8	2	24
San Sebastian.....	1	1			1
Villalba.....	1	1			1
Yauco.....	1	1			1
Total.....	266	275	78	6	197



*Table showing investigations made in connection with the workman's compensation act from July 1, 1917, to June 30, 1918.*

Industry of employer.	Number of accidents.	Location.
Agents.....	1	Arroyo.
Bakery.....	1	Cabo Rojo.
Do.....	3	Caguas.
Do.....	1	Juncos.
Do.....	7	Ponce.
Do.....	1	Rincon.
Do.....	11	San Juan.
Blacksmith shop.....	1	San Juan.
Brewery.....	2	San Juan.
Carpenter shop.....	1	Aguadilla.
Do.....	2	Arecibo.
Do.....	10	Ponce.
Do.....	5	San Juan.
Chocolate factory.....	1	Rio Piedras.
Coco Fiber Co.....	2	San Juan.
Coffee dealers.....	1	Ponce.
Coffee mill.....	6	Anasco.
Do.....	2	Arecibo.
Do.....	1	San Sebastian.
Contractor.....	1	Arecibo.
Do.....	1	Bayamon.
Do.....	18	San Juan.
Distillery.....	1	San Juan.
Foundry.....	8	San Juan.
Gas Co.....	1	Ponce.
Haberdashery.....	1	San Juan.
Ice factory.....	1	Arecibo.
Laundry.....	1	San Juan.
Ice factory.....	1	San Juan.
Lumber yard.....	3	Ponce.
Do.....	5	San Juan.
Merchants.....	3	San Juan.
Mechanic shop.....	4	Ponce.
Do.....	1	San Juan.
Power and light.....	7	Ponce.
Do.....	10	San Juan.
Quarry.....	4	Caguas.
Do.....	4	Rio Piedras.
Do.....	13	San Juan.
Storehouse.....	2	Arecibo.
Do.....	3	San Juan.
Storekeeper.....	1	San Juan.
Sugar central.....	51	Arecibo.
Do.....	20	Arroyo.
Do.....	33	Barceloneta.
Do.....	4	Cabo Rojo.
Do.....	1	Camuy.
Do.....	7	Canovanas.
Do.....	13	Carolina.
Do.....	23	Cayey.
Do.....	23	Juncos.
Do.....	7	Mamabo.
Do.....	11	Mayaguez.
Do.....	3	Patillas.
Do.....	3	Ponce.
Do.....	24	Rincon.
Do.....	62	Rio Piedras.
Do.....	13	San Sebastian.
Do.....	3	Vieques.
Do.....	1	Vega Baja.
Do.....	42	Yabucoa.
Tannery.....	1	San Juan.
Tobacco Co.....	1	San Juan.
Transportation.....	1	Aguadilla.
Do.....	3	San Juan.
Total.....	504	

*Statistical data of the free employment agency for the fiscal year 1917-18.*

Month.	Number of applicants enrolled.	Number of applicants recommended.	Number of applicants employed.	Number recommended but who did not report.
<b>1917.</b>				
July.....	9	8	.....	2
August.....	20	23	5	12
September.....	19	13	2	3
October.....	21	11	1	1
November.....	19	17	4	4
December.....	13	12	3	5
<b>1918.</b>				
January.....	194	36	8	21
February.....	81	24	5	10
March.....	22	13	4	4
April.....	18	31	8	11
May.....	17	10	4	5
June.....	16	5	1	2
<b>Total.....</b>	<b>419</b>	<b>203</b>	<b>45</b>	<b>84</b>

*Number of applicants for the different occupations.*

Bakers.....	2	Laborers.....	11
Blacksmiths.....	2	Machinists.....	5
Bookkeeper.....	1	Masons.....	9
Carpenters.....	208	Maids, chamber.....	5
Chemist (sugar).....	1	Mechanics.....	2
Chauffeur.....	1	Messengers.....	15
Cigarmaker.....	1	Nurses of child.....	2
Clerk, office.....	38	Overseer.....	1
Clerk, store (male).....	17	Painters.....	19
Clerk, store (female).....	4	Plumbers.....	2
Collector.....	1	Servants (female).....	28
Conductors.....	2	Servants (male).....	3
Confectioner.....	1	Stenographers.....	6
Cooks (female).....	16	Stoker.....	1
Cook (male).....	1	Sugar expert.....	1
Dressmakers.....	4	Tailors.....	3
Embroiderer.....	1	Teacher, drawn work and embroidery.....	1
Farmers.....	8	Telephone operators.....	4
Foremen.....	2	Timekeepers.....	7
Hatter.....	1	Typewriters.....	2
Housekeepers.....	3	Watchmen.....	3
Hotel waiter.....	1		
Ironer.....	1		
Janitors.....	2		
		<b>Total.....</b>	<b>449</b>

Table showing the work done in connection with the women and children law from July 1, 1917, to June 30, 1918.

Town.	Kind of establishment.	Number of establishments.	Number of inspections.	Women employed.		Children employed.	
				Number.	Average wage daily.	Number.	Average wage daily.
Adjuntas.....	Coffeeselection and mill.....	2	2	65	\$0.27	2	\$0.18
Aguadilla.....	Tailoring shop.....	2	2	1	.30		
Do.....	Dry goods store.....	3	6		.75		
Do.....	Preparation of oranges for export.....	1	1	5	.45		
Do.....	Stripping shop.....	2	4	23	.30	5	.25
Do.....	Cigar factory.....	5	26	17	.31	2	.30
Do.....	Coffeeselection and mill.....	1	6	124	.25		
Aguas Buenas.....	Stripping shop.....	1	2	16	.40		
Do.....	Tobacco selection.....	1	2	5	.50	1	.30
Do.....	Cigar factory.....	4	8	67	.75	4	.40
Albionita.....	Tobacco selection.....	1	1	357	.35		
Añasco.....	Cigar factory.....	3	6	2	.40		
Do.....	Sewing shop.....	2	2	15	.50	2	.35
Arecibo.....	Stripping shop.....	4	12	213	.50		
Do.....	Cigar factory.....	2	6	16	.45		
Do.....	Coffeeselection and mill.....	2	6	133	.48		
Do.....	Hat-cleaning shop.....	3	9	9	.65		
Do.....	Sewing shop.....	2	4	31	.40		
Barceloneta.....	Stripping shop.....	5	18	108	.45	3	.20
Do.....	Cigar factory.....	3	6	4	.20		
Do.....	Sewing shop.....	2	4	4	.25		
Barros.....	do.....	2	2	4	.30		
Bayamon.....	do.....	8	12	15	.50		
Do.....	Stripping shop.....	1	5	242	.60	9	.40
Do.....	Cigar factory.....	5	12	254	.85		
Cabo Rojo.....	Shoemaking shop.....	5	5	1	.50		
Do.....	Cigar factory.....	10	15	2	.50	3	.25
Caguas.....	Tobacco selection.....	4	12	751	.60	17	.40
Do.....	Laundries.....	2	2	1	.50		
Do.....	Cigar factory.....	15	45	37	.55		
Do.....	Sewing shop.....	14	28	20	.40		
Do.....	Stripping shop.....	15	54	1,755	.65	19	.45
Camuy.....	do.....	1	2	73	.30	6	.30
Do.....	Cigar factory.....	2	4	1	.30		
Carolina.....	do.....	2	4	2	.40		
Do.....	Sewing shop.....	1	2	3			
Cayey.....	Stripping shop.....	5	15	561	.60	5	.40
Do.....	Tobacco selection.....	1	8	566	.54	5	.35
Do.....	Cigar factory.....	10	15	43	.65	2	.35
Do.....	Sewing shop.....	12	12	30	.65	3	.30
Ciales.....	Coffeeselection.....	2	6	62	.30		
Do.....	Sewing shop.....	1	2	1	.25		
Do.....	Stripping shop.....	6	10	278	.40	16	.20
Cidra.....	do.....	1	1	23	.45	5	.25
Coamo.....	Coffeeselection and mill.....	6	10	87	.20		
Comerio.....	Sewing shop.....	4	4	8	.65		
Do.....	Tobacco selection.....	1	2	225	.60		
Corozal.....	Stripping shop.....	1	2	44	.42	8	.30
Fajardo.....	Sewing shop.....	2	4	4	.25	2	.15
Do.....	Cigar factory.....	6	16	4	.50		
Guayama.....	do.....	9	12	3	.30		
Do.....	Sewing shop.....	2	2	4	.35		
Gualinabo.....	Cigar factory.....	1	1	2	1.00		
Gurabo.....	Stripping shop.....	3	6	201	.50		
Do.....	Tobacco selection.....	1	4	67	.48		
Do.....	Cigar factory.....	4	8	28	.50		
Hatillo.....	Stripping shop.....	1	2	4	.30		
Hormigueros.....	Cigar factory.....	2	2	2	.30		
Humacao.....	do.....	7	14	7	.40	2	.20
Do.....	Sewing shop.....	12	24	34	.45		
Isabela.....	Stripping shop.....	3	6	65	.30		
Juana Diaz.....	Cigar factory.....	2	2	4	.40		
Juncos.....	Stripping shop.....	5	15	344	.45		
Do.....	Cigar factory.....	3	7	40	.40		
Do.....	Tobacco selection.....	5	8	273	.60	1	.40
Do.....	Sewing shop.....	3	5	13	.45		
Lajas.....	Cigar factory.....	2	4	2	.30		
Lares.....	Coffeeselection and mill.....	6	20	210	.25		
Manati.....	Cigar factory.....	4	6	117	.75		
Do.....	Stripping shop.....	9	36	532	.30		
Do.....	Sewing shop.....	1	1	4	.50		
Mayaguez.....	Bay rum factory.....	2	2	4	.30		
Do.....	Dry goods store.....	18	18	13	.80		
Do.....	Stripping shop.....	3	9	143	.75		

Table showing the work done in connection with the women and children law from July 1, 1917, to June 30, 1918—Continued.

Town.	Kind of establishment.	Number of establishments.	Number of inspections.	Women employed.		Children employed.	
				Number.	Average wage daily.	Number.	Average wage daily.
Mayaguez.....	Vermicelli factory.....	1	3	17	\$0.30	.....	.....
Do.....	Sewing shop.....	4	4	28	.70	.....	.....
Do.....	Coffee selection and mill.....	6	12	109	.25	.....	.....
Do.....	Cigar factory.....	11	16	102	.65	.....	.....
Do.....	Tailoring shop.....	15	25	4	.50	.....	.....
Do.....	Chocolate manufacturing.....	3	7	9	.35	.....	.....
Do.....	Shoemaking shop.....	30	30	16	.55	.....	.....
Do.....	Lace, drawn work and embroidery.....	4	12	67	.40	19	\$0.25
Morovis.....	Stripping shop.....	6	12	159	.45	5	.20
Naguabo.....	Sewing shop.....	1	1	4	.30	.....	.....
Naranjito.....	Stripping shop.....	1	2	100	.60	.....	.....
Patillas.....	Sewing shop.....	2	2	2	1.00	.....	.....
Penuelas.....	Stripping shop.....	1	1	68	.30	.....	.....
Do.....	Cigar factory.....	10	10	50	.75	2	.30
Ponce.....	Drug store.....	1	1	8	.60	.....	.....
Do.....	Milk depot.....	23	23	23	.90	.....	.....
Do.....	Dry goods store.....	8	8	21	.85	.....	.....
Do.....	Hat-cleaning shop.....	7	7	21	.75	.....	.....
Do.....	Stripping shop.....	3	6	436	.50	.....	.....
Do.....	Cigar factory.....	10	12	4	.45	.....	.....
Do.....	Coffee selection and mill.....	4	7	152	.40	.....	.....
Do.....	Lace, drawn work, and embroidery.....	5	10	150	.50	3	.25
Do.....	Sewing shop.....	10	10	21	.40	.....	.....
Do.....	Hat factory.....	1	2	27	.50	.....	.....
Quebradillas.....	Cigar factory.....	2	4	6	.25	.....	.....
Do.....	Stripping shop.....	2	9	117	.30	10	.30
Rincon.....	Cigar factory.....	2	4	12	.17	.....	.....
Rio Piedras.....	Laundry.....	1	1	3	.60	.....	.....
Do.....	Sewing shop.....	2	2	2	1.00	.....	.....
Do.....	Underwear factory.....	1	5	39	.48	4	.35
Do.....	Vermicelli factory.....	1	2	36	.45	.....	.....
Do.....	Stripping shop.....	1	3	93	.70	.....	.....
San German.....	do.....	1	1	4	.30	.....	.....
Do.....	Cigar factory.....	3	6	2	.22	.....	.....
San Juan.....	Trunk factory.....	1	5	7	.45	.....	.....
Do.....	Laundries.....	13	39	129	.80	.....	.....
Do.....	Stripping shop.....	8	40	1,183	.75	30	.40
Do.....	Cigarette factory.....	2	3	832	1.10	.....	.....
Do.....	Cigar factory.....	7	36	83	.90	.....	.....
Do.....	Printing shop.....	13	33	39	.60	.....	.....
Do.....	Hat-cleaning shop.....	8	16	66	1.00	.....	.....
Do.....	Sewing shops.....	20	57	186	.60	.....	.....
Do.....	Dry goods store.....	39	79	198	.65	.....	.....
Do.....	Hat factory.....	2	2	32	.65	.....	.....
San Lorenzo.....	Cigar factory.....	5	5	72	1.00	.....	.....
Do.....	Stripping shop.....	5	10	250	.50	.....	.....
Do.....	Tobacco deposit.....	3	9	9	.60	1	.25
San Sebastian.....	Coffee selection and mill.....	3	3	19	.20	.....	.....
Toe Alta.....	Stripping shop.....	1	4	22	.30	.....	.....
Do.....	Cigar factory.....	4	8	8	.40	.....	.....
Ututo.....	Stripping shop.....	2	4	175	.25	.....	.....
Do.....	Cigar factory.....	3	6	77	.55	.....	.....
Vega Alta.....	Stripping shop.....	3	3	16	.60	.....	.....
Vega Baja.....	Sewing shop.....	3	3	7	.50	.....	.....
Do.....	Stripping shop.....	2	6	168	.25	.....	.....
Yauco.....	Coffee selection and mill.....	2	2	100	.30	.....	.....

*Industrial statistics of Porto Rico as per investigations made by officials of the bureau of labor, during April, May, and June, 1918.*

Towns.	Shoemaking shops.		Hat cleaning shops and factories.		Sewing shops.		Bakeries.		Barber shops.	
	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.
Aguadilla.....	4	8	2	2			3	22	2	2
Agua Buenas.....	6	6					1	4	2	4
Aibonito.....	2	2					2	8	3	3
Añasco.....	3	3					1	8	4	4
Arecibo.....	15	52	3	5	2	32	2	21	11	14
Arroyo.....	5	5					1	6	3	3
Barceloneta.....	2	9	1	1	1	3	1	8	3	
Barranquitas.....	1	2					1	3	1	1
Barros.....	1	1			2	3	1	3	1	1
Bayamon.....	10	20	2	3	7	16	3	15	7	9
Cabo Rojo.....	5	9	3	3			1	7	3	6
Caguas.....	18	34	5	5	14	26	4	20	16	23
Camuy.....	2	3	1	1			1	5	2	
Canovanas.....	1	2					1	5	2	2
Carolina.....	5	6			1	3	2	8	3	3
Cayey.....	5	17	2	2	0	9	1	8	4	4
Ceiba.....	2	2							3	3
Ciales.....	6	11	1	1	1	1	2	5	2	2
Cidra.....	3	3					2	8	2	2
Coamo.....	4	6					1	3	2	2
Comerio.....	4	12			4	8	3	12	3	5
Corozal.....	2	6					2	14	2	2
Dorado.....	2	2			1	1	1	7	1	2
Fajardo.....	8	10	1	1	1	2	3	13	10	11
Guainabo.....	2	2	1	2			1	3	1	1
Guayama.....	3	6	2	2	2	4	2	12	8	8
Gurabo.....	3	4					1	4	3	3
Hatillo.....	3	4					2	5	1	1
Hormigueros.....							2	10		
Humacao.....	3	7	1	2	12	23	4	21	12	13
Isabela.....	3	8	1	1			2	11	2	2
Juana Díaz.....	3	5					1	3		
Juncos.....	7	16			3	7	1	6	5	6
Lares.....	2	11							3	3
Lajas.....	1	1					1	6	2	2
Las Piedras.....	1	1					1	4	2	2
Luquillo.....	3	3					1	1	1	1
Manatí.....	4	15	1	1			2	13	4	4
Maricao.....	2	3					1	5		
Maunabo.....	3	3					2	6	3	4
Mayaguez.....	30	147	8	13	4	117	2	48	33	36
Morovis.....	1	1					1	4	1	2
Naguabo.....	5	5			1	4	4		6	6
Naranjito.....	1	1					1	1	1	1
Patillas.....	2	5			1	1	1	2	1	2
Ponce.....	39	67	7	27	10	189	8	221	43	54
Quebradillas.....	5	14	2	2			2	4	3	3
Rincon.....			1	1			1	12		
Rio Grande.....	5	12					2	7	4	5
Rio Piedras.....	3	8			2	2	3	15	5	5
San German.....	1	1	3	3			1	12	7	8
San Juan.....	38	69	7	60	20	168	10	68	48	75
San Lorenzo.....	4	6			1	1	1	7	4	4
S. Sebastian.....	3	12					1	6	2	2
Toa Alta.....	2	2					4	11	4	4
Toa Baja.....	2	3					1	3	1	1
Utuado.....	3	15	1	1			2	20	4	6
Vega Alta.....	2	3					1	5	3	4
Vega Baja.....	2	15			1	1	2	13	3	7
Yabucoa.....	3	10					1	5	5	5
Total.....	310	716	56	139	97	621	113	785	316	393

*Industrial statistics of Porto Rico as per investigations made by officials of the bureau of labor, during April, May, and June, 1918—Continued.*

Towns.	Tailoring shops.		Cigar factories.		Carpenter shops.		Belt-making shops.		Coffee mills.	
	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.
Aguada.....	1	1	2	9						
Aguadilla.....	1	2	3	55	2	37	1	2	1	64
Aguas Buenas.....			3	478						
Albionito.....			3	5						
Añasco.....	2		2						2	4
Arecibo.....	5	8	2	47	2	5			2	144
Barceloneta.....	1	1								
Barros.....	1	1	2	4						
Bayamon.....	7	9	4	1,581						
Cabo Rojo.....	3	6	6	26						
Caguas.....	16	23	15	201	2	3				
Camuy.....	2	2	2	2						
Canovanas.....	2	2								
Carolina.....	3	3	2	15						
Cayey.....	4	4	3	96						
Celba.....	3	3								
Ciales.....	2	2	2	15					2	36
Coamo.....									1	90
Comerio.....	1	1	2	7	1	1				
Corozal.....			1	4					1	5
Dorado.....			2	7						
Fajardo.....	1	1	5	23	1	1				
Gusimabo.....			1	2						
Guayama.....	1	1	5	45	1	1	1	1		
Gurabo.....			2	4						
Hatillo.....			1	1						
Hormigueros.....			2	4						
Humacao.....	2	2	7	29	1	1				
Isabela.....	2	2	1	1						
Juana Diaz.....			2	82						
Juncos.....			2	78						
Lares.....	1	1							4	92
Lajas.....	1	1	2	2						
Las Piedras.....			1	2						
Luquillo.....			2	3						
Manati.....	1	1	1	474	1	1				
Maricao.....									4	11
Maunabo.....	3	7								
Mayaguez.....	15	24	11	590	9	24	1	2	4	67
Morovis.....			1	7					1	4
Naguabo.....	1	1	4	16						
Naranjito.....			3	14						
Patillas.....	1	1	3	10			1	1		
Ponce.....	23	32	10	408	11	27	7	7	4	161
Quebradillas.....			2	20	1	1				
Rincon.....			2	28						
Rio Grande.....			2	4						
Rio Piedras.....	2	2	1	1						
San German.....	3	6	2	20						
San Juan.....	22	33	7	2,220	10	151				
San Lorenzo.....	1	1	3	13						
S. Sebastian.....	1	3							2	
Tos Alta.....			4	23						
Tos Baja.....			1	11						
Ututo.....	2	3	1						2	
Vega Alta.....			3	10						
Vega Baja.....			2	4						
Yabucoa.....	5	5			3	14			1	1
Total.....	137	192	156	6,725	43	254	12	14	30	678

*Industrial statistics of Porto Rico as per investigations made by officials of the bureau of labor, during April, May, and June, 1918—Continued.*

Towns.	Printing shops.		Tobacco-stripping shops.		Confectionery.		Blacksmith shops.		Soda-water factories.	
	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.
Arecibo.....	4	13	2	112	1	5	2	6	1	5
Barceloneta.....			2	4	1	16				
Bayamon.....							1	2		
Cabo Rojo.....	2	2								
Caguas.....	3	5	13	1,442			2	5	2	6
Camuy.....					1	1				
Cayey.....			1	200						
Ciales.....			1							
Comerio.....			1	265						
Guayama.....	1	5								
Humacao.....	2	7			1	4		1		
Isabela.....			2	53						
Juana Diaz.....			1	34						
Juncos.....			1	278						
Manati.....	1	1	7	403	1	1				
Mayaguez.....	3	28	2	214	1	2	4	10		5
Morovis.....			2	5						
Naranjito.....			1	123						
Ponce.....	6	64	2	349	2	2	5	11	2	7
Quebradillas.....			1	37	1	1				
Rio Piedras.....			1	88						
San German.....	2	4						1		
San Juan.....	13	217	5	1,205	5	40	5	96	3	37
San Lorenzo.....					3	1	2	2		
San Sebastian.....					1	2	1	2		
Utua.....			2	195	1	3				
Total.....	37	346	46	4,757	17	80	23	136	9	60

Towns.	Laundries.		Ice factories.		Tin shops.		Baryum factories.		Chocolate factories.	
	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.
Añasco.....			1	5						
Arecibo.....	2	4	1	4						
Caguas.....	2	2					1	6		
Cayey.....			1	3						
Fajardo.....			1	2						
Guayama.....			1	5						
Humacao.....			1	3						
Manati.....			1	6						
Mayaguez.....					1	1	2	8	3	24
Ponce.....	12	15	1	5	7	10	2	7		
Rio Piedras.....	1	3								
San Juan.....	13	147	1	6	4	8	3	10		
Total.....	30	171	9	39	12	19	8	31	3	24

Towns.	Slipper factories.		Spring-bed factories.		Salt mills.		Watch repairing shops and silversmith shops.		Mosaic factories.	
	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.
Arecibo.....			1	2			2	4		
Mayaguez.....			1	7			5	8		
Ponce.....	1	3	1	1	3	14	11	13	1	5
San Juan.....			2	7			11	32	1	2
Total.....	1	3	5	17	3	14	29	57	2	7

*Industrial statistics of Porto Rico as per investigations made by officials of the bureau of labor, during April, May, and June, 1918—Continued.*

Towns.	Trunk factories.		Mattress factories.		Vermicelli factories.		Breweries.		Fertilizer factories.		Tanneries.	
	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.
Arecibo.....									1	38	1	18
Mayaguez.....					1	19						
Ponce.....	1	3	2	34	1	20						
San Juan.....	1	15					1	36				
Total.....	2	18	2	34	2	39	1	36	1	38	1	18

Towns.	Underwear factories.		Quarries.		Broom factories.		Cigarette factories.		Total by towns.	
	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.	Shops.	Workmen.
Aguada.....									3	10
Aguadilla.....									19	194
Agua Buenas.....									12	493
Alfonito.....									10	18
Añasco.....									13	26
Arecibo.....									61	489
Arroyo.....									9	14
Barceloneta.....									12	45
Barranquitas.....									3	6
Barros.....									8	13
Bayamón.....									27	1,414
Cabo Rojo.....									51	203
Caguas.....									112	1,796
Camuy.....									11	16
Canovanas.....									6	11
Carolina.....									16	38
Cayey.....									14	247
Celba.....									8	8
Ciales.....									19	73
Cidra.....									7	13
Coamo.....									8	101
Comerio.....									19	311
Corozal.....									8	31
Dorado.....									6	19
Fajardo.....									31	64
Guainabo.....									6	8
Guayama.....									31	97
Gurabo.....									9	15
Hatillo.....									7	11
Hormigueros.....									4	14
Humacao.....									46	109
Isabels.....									13	78
Juana Diaz.....									7	174
Juncos.....									19	391
Lares.....									10	107
Lajas.....									7	12
Las Piedras.....									5	9
Luquillo.....									7	8
Manati.....									25	925
Maricao.....									7	19
Maunabo.....									11	20
Mayaguez.....					1	2			140	1,291
Morovis.....									7	23
Naguabo.....									21	82
Naranjito.....									7	140
Patillas.....									10	22
Ponce.....									222	1,756
Quebradillas.....									17	82
Rincon.....									4	41
Rio Grande.....									13	28
Rio Piedras.....									18	124
San German.....									20	55
San Juan.....	1	22	2	41			2	892	237	5,713
San Lorenzo.....		1							16	37
San Sebastian.....									11	27
Toa Alta.....									14	40
Toa Baja.....									5	18
Utumbo.....									18	243
Vega Alta.....									9	22
Vega Baja.....									10	40
Yabucoa.....									13	35
Total.....	1	22	2	41	1	2	2	892	1,519	17,418

## SUMMARY.

Grand total of shops visited..... 1,519  
 Grand total of workmen employed..... 17,418





## APPENDIX X.

### REPORT OF THE FOOD COMMISSION.

SAN JUAN, P. R., September 6, 1918.

The GOVERNOR OF PORTO RICO,

*San Juan, P. R.:*

On April 12, 1917, a joint resolution of the Legislative Assembly of Porto Rico received the governor's approval, so that six days after the entry of the United States into the great world war Porto Rico had taken steps to provide against contingencies by appropriate legislation, which gave to a food commission, under the governor's supervision, unusual powers with which to meet the emergencies in providing for the food supply of its inhabitants that such a state of war was bound to develop.

Before the struggle was a month old the governor had appointed the five commissioners in accordance with the law, and on May 5, 1917, Messrs. Antonio R. Barceló, John M. Turner, Luis Sanchez Morales, Nathaniel A. Walcott, and Albert E. Lee met in session in a temporary office, ceded by the comision economica on the top floor of the Intendencia Building.

At this first meeting Mr. Barceló, who had introduced the joint resolution in the executive council, was elected president, and Mr. John M. Turner treasurer, his bond having been fixed at \$50,000.

Daily sessions were held until the preliminary organization was completed by the appointment of Mr. E. M. Vassallo as secretary, and committees on municipal affairs, fuel, agriculture, publicity, and transportation, under the chairmanship of Messrs. Barceló, Turner, Walcott, Sanchez Morales, and Lee, respectively. This organization has been maintained to date with the following exception:

Mr. Barceló found that his duties in the senate, to which he was elected in July, 1917, and of which he became president on August 13, did not permit his continuing as a member and president of the food commission. He therefore resigned on August 30, and his resignation was accepted by the governor on October 1, Mr. Manuel Camufias having been appointed by the governor on October 1 to succeed him. Mr. Lee was elected president on October 2, 1917.

The absence of statistics on which to base estimates made a hasty survey of the supplies of foodstuffs available necessary, and through the effective cooperation of the insular police it was found that the stocks of the principal commodities on the island then amounted approximately to the following quantities in all ports and including the 15 largest towns in the island.

*Stock in first and second hands in 15 principal cities and towns in Porto Rico on May 9, 1917.*

Rice.....	pounds..	14,536,700
Flour.....	bags..	13,294
Lard.....	pounds..	1,006,182
Salt fish.....	do.....	312,463
Pork.....	do.....	678,753
Condensed milk.....	cases..	1,209

With these figures as a basis and the customs statistics (see Tables I, II, III, IV, V, VI, and VII at the end of this report) to determine the annual consumption of the island, it was estimated that the stock of rice was sufficient for about six weeks, while there was flour on hand for less than three weeks. Further investigation of conditions through hearings, at which merchants and brokers were questioned, elicited the fact that although on all articles a steady supply could be expected to arrive weekly by the regular steamers, the rice situation was really alarming and, as the annual per capita consumption of rice is about 150 pounds, needed immediate attention.

The food commission almost immediately after its formation publicly announced its program as follows:

1. To make public the desire of the food commission to obtain the cooperation of the merchants in general, in order that the commission might not be compelled to take coercive measures to put the law into effect;

2. To carry on an active propaganda throughout the island to stimulate the cultivation of native products as the best means for averting the probable crisis arising from scarcity of food in the market because of the war, in which campaign the commission had the aid of the Federal Department of Agriculture and the insular department of education; and

3. To encourage the propaganda by means of the daily press, informing the public of the powers vested in the commission and the need which this commission had of the cooperation of all classes of society in order to assure success.

#### COMMERCIAL TRANSACTIONS.

The rice situation as above outlined placed the commission in the dilemma of coming to some agreement with the wholesale merchants such as would assure a continued supply of rice and other foodstuffs, or, failing in this, to enter the market and provide the supply of as large a part as its resources permitted.

These resources are limited by law to \$1,000,000, and as such a sum would, in the event that a large share of the merchandising of the island's supply should fall to the commission, equal an allowance of about 90 cents per capita, special arrangements must be made, or this sum would be totally inadequate to properly care for the situation.

The food commission also realized that the entire commercial structure of the island, with its credit system, was necessary and could not be upset without grave consequences, and it therefore endeavored to dispel any feeling of distrust which the merchants might have or uncertainty as to the attitude it would assume.

Four days after holding its first meeting a plan was submitted to a representative delegation of the insular chamber of commerce which it was thought would prove to the business community how highly the food commission valued its cooperation. It was proposed to enter into voluntary agreements with such wholesalers as cared to accept the plan whereby these merchants would make their purchases of such foodstuffs as might be agreed upon, in complete accord with the commission, on a guaranty by it as to a percentage of profit to be fixed by mutual agreement, and variable for each article on the usual normal profit, for which guaranty a small commission was to be paid by the merchants accepting the plan. The commission was intended for the formation of a fund which after covering the general expenses of supervision could be applied to reimbursing such losses as might occur under the plan. The merchants that accepted the proposition would be agents of the food commission, and all market information available on the controlled foodstuffs was to be mutually exchanged confidentially for the purpose of assuring intelligent purchasing at the lowest possible cost.

For the purpose of assuring a minimum supply at all times, one of the conditions of this agreement was that each agent would hold a reserve of such foodstuffs, to be sold only on instructions from the food commission.

The minor details of the general plan outlined was left for discussion by a committee of the merchants and the food commission.

For some reason unknown to the food commission, this plan was flatly turned down without even entering into any discussions as to its merits, and the food commission was urged by the insular chamber of commerce to enter the market and make its own purchases of foodstuffs freely.

Meanwhile speculation was rife in the island, notwithstanding the earnest efforts of a number of the most important business firms, to maintain prices within the high range which the rise in the American market appeared to justify. There was a tendency to make unusual shipments of foodstuffs to the neighboring islands, and in order to prevent a depletion of the stocks on hand the commission, on May 11, issued its first resolution, by the terms of which no foodstuffs specified therein could be exported from Porto Rico, except with the written consent of the food commission.

There was some question as to the legality of this measure, but the stand taken by the commission was that under paragraph 6, of section 3, of the food law, it had the right and "power to take over the stock of any or all dealers, producers, or growers by paying them the reasonable value thereof," and that this gave the commission an option to purchase all foodstuffs on the island, so that unless it were consulted before shipments were made, it could not properly exercise this power.

The customs authorities have at all times cooperated with the food commission, and the most cordial relations have always existed between the offices, and when the war trade board, at the request of the United States Food Administration, ruled that all export licenses of foodstuffs must be approved by the food commission, the provisions of the above mentioned resolution were given the fullest authority.

It may be well to say, however, that at no time has any action of the food commission been seriously questioned, as the state of war has brought about a realization that the circumstances required unusual measures.

On May 15, the first resolution fixing prices was adopted and by it, prices at which rice, flour, and condensed milk could be sold at retail, were fixed.

A proviso that any actual losses which should be caused by this resolution would be reimbursed by the commission, proved the fairness of the prices fixed, since only one claim was actually substantiated and amounted to \$4.24.

The financial arrangements required by the attitude of the trade are touched upon elsewhere in this report, so that the immediate entry of the food commission into the merchandizing of foodstuffs, was initiated as follows:

About two or three months prior to the appointment of the food commission, a sharp rise in the price of rice had taken place, in fact this rise was equal to over 100 per cent of the former prices. On rice in the island an unusual profit had been realized by the merchants which aggregated over \$500,000 above the regular profits of the trade, and represented the rise in values in the markets of production.

Offers of rice were very limited, as dealers in the north were holding for a still higher range of values, while buyers here were expecting a reaction, and not buying. No order had been placed for nearly two months, and as brokers would only submit their offers "subject to confirmation" by their principals, it was evident that the speculators in the north would feel the market, and not sell until they could ascertain how high buyers in the island could afford to go. As the rice crop had been over for some time, and the new crop would not be available for shipment to Porto Rico for over four months, there was a real cause for concern, and the food commission found itself facing a rice shortage with a bull market, the limit of which had not been reached, and the handling of this situation required special tact.

It was the aim of the commission then to prevent a further rise in price, to purchase a supply which would serve in an emergency and to try, if possible, by careful manipulating to reduce the prevailing price.

To carry out this program it was decided to discourage large independent purchases in the American market, to endeavor to purchase Asiatic rice, and to pick up such American rice as would be offered on a firm basis, and not on the prevailing custom of "subject to confirmation" by sellers.

Offers of Asiatic rice were requested through the bureau of insular affairs, and brokers were invited in a casual way to submit offers of all foodstuffs on a firm basis and regardless of quantity. This was done to prevent creating the appearance of a large demand in the United States markets, as if bids had been asked for say 50,000 bags of rice, and five or six brokers had cabled the inquiry, it would possibly have had the effect of appearing for a quantity five or six times what was really needed.

The lack of orders from the trade was beginning to be felt in New Orleans and other southern markets, and the food commission was anxious to buy without disturbing these conditions so that the rise in prices could be arrested while supplies could be obtained in the most favorable circumstances.

Several offers were made, but these being for lots of rice already on the island, the commission was not interested. Finally, one firm in San Juan made a firm offer on behalf of rice millers in Houston, Tex., and based on samples selected by the commission which represented three types of rice. A counter offer was made by the commission which was accepted, and thus 50,000 pockets of rice were purchased. On delivery, however, about 9,000 of these were rejected as under grade.

The retail prices of rice having been fixed in the meantime, and a reserve having been purchased by the commission as stated, the effect was to bring about a reduction in the prevailing prices, which even reflected in the New Orleans and other southern markets and, as usual with an unstable market, buyers were reluctant to purchase so that the needed supplies were not assured, though prices here had been stabilized.

Then came the transaction which has been unique in the experience of food control. Through the bureau of insular affairs and by the cooperation of Governor General Harrison, of the Philippine Islands, a former German steamer was placed at the disposal of the food commission, and the purchase of 7,000 tons of Saigon rice was arranged for. It was intended that this cargo should be loaded at Saigon, and proceed to Porto Rico via the Panama Canal, coaling in Japan, San Francisco, and the canal, and it was calculated that the ship would arrive in Porto Rico early in August, just about the time when the supplies on hand would be exhausted. The terms on which the ship was turned over to the commission, which was to pay only the expenses of the voyage and the insurance on the hull, and the original cost of the rice, greatly reduced by the manner in which arrangements were made to finance the cargo and for its purchase and shipment, made the prospective cost of the rice, landed in San Juan, duty paid, not over \$3.54 per 100 pounds or less than half the prevailing price

for American rice at the time. There was a further advantage in that this price would yield customs duties accruing to the Porto Rico government amounting to \$140,000, at the rate of one cent per pound, so that at any price at which it was decided to market the rice on its arrival, there was the prospect of a handsome profit to the food commission and the general government, and consumers would also be benefited.

So unusual were these circumstances that the commission gave out officially a recommendation to the trade to be cautious in its purchases of rice before the new crop was available, although it was impossible to give out any particulars of the purchase, as the matter must be dealt with confidentially to prevent the enemy from obtaining information as to the movement of the vessel.

The military need of secrecy was emphasized when the Navy Department requisitioned the steamer, replaced 2,000 tons of rice by coal, and used her as a tender to a flotilla which was sent, via Suez, to European waters. It is well to state that the few employees of the food commission and of the governor's and the executive secretary's offices who were necessarily acquainted with all these circumstances, maintained such absolute secrecy that it was only late in November, when all the other particulars of the transaction were given out, that the deal became known.

The change in the routing of this cargo placed the prospective date of arrival of the steamer at least a month later than originally intended, and the question of supplies in the meanwhile became a pressing matter. The market in New Orleans had responded to the action of the food commission, by a decline of over \$1 per pocket, and while other purchases had meanwhile been made by the commission, it was obliged to hold these supplies as a reserve. Some ill-wishers of the food commission are said to have felt rather elated at the prospective loss it would have to face by the decline in prices, and although these conditions were discussed from all angles by the commission, it was decided to hold its stocks until supplies on hand should be exhausted, and then to sell at a price which would about cover cost. It was confidently expected that the commission would lose \$50,000 on its first large transaction, but the commission, in full possession of all the facts, was equally confident of its own judgment.

So carefully had every detail been studied out that, almost to a day, the call on the rice reserve held by the commission was started. In a week one-half the stocks held had been marketed, and in view of the lack of news as to the cargo from Saigon it became necessary to restrict sales.

In these circumstances, news was received that the steamer was at a southern European port, and that owing to the long time the rice had been on board on a voyage through the hottest belt in the world, it was possible that weevils had invaded the cargo. A recommendation for authority to sell the cargo in Europe was added. In view of this information, and to the fact that even were the vessel then ordered to Porto Rico, it would arrive at about the time when the new domestic crop was available, and it would have to pass through the submarine danger zone with consequent risk of loss, and that in the event of loss, the insurance was based upon the cost of the cargo with a narrow margin while the replacement value was twice as great, it was decided to authorize the sale of the cargo, provided the replacement value could be obtained.

Negotiations proceeded very slowly, and in order to secure a new supply of rice immediately, the sale was accomplished. Mr. Lee proceeded to Washington, accompanied by the rice expert of the food commission, Mr. Cabanillas.

The sale was finally made to the Italian Government and yielded a net profit of over half a million dollars. (See Liquidation as shown in Table A.) To Maj. Gen. Frank McIntyre, Chief of the Bureau of Insular Affairs, is due the success of this transaction, which he handled in the ablest manner for the commission.

The trip of Mr. Lee and Mr. Cabanillas included New Orleans, Beaumont (Tex.), Houston (Tex.), and San Francisco (Cal.). In each of these places purchases of rice were made. At the latter city these purchases included some lots of Asiatic rice and a full cargo of California rice to be shipped on a steamer then under construction, which was chartered by the commission for this voyage.

Mr. Lee also arranged for financing these purchases through a bank in San Francisco and a bank in New York, in terms that were most favorable to the commission. The whole question of finance is dealt with under another head.

The total volume of the mercantile transactions of the commission during the first year of its existence is given in the financial statement prepared by the auditor of Porto Rico, which appears as an appendix at the end of this report, and in the remarks on the various items of this statement which are made elsewhere.

The merchandising of food articles includes 16,908,196 pounds of rice, 3,657,760 pounds of wheat flour, 55,468 pounds of corn meal and 8,653 cans of charcoal. These figures do not include the Saigon rice cargo to which reference has been made.

## FINANCES.

In the appendix to this report will be found a financial report, prepared by the auditor of Porto Rico, which covers the period from the 5th of May, 1917, to the 30th of April, 1918, when it was decided to close the first balance sheet of the food commission. As this statement comprises the first year of the work of the food commission, and as it would be necessary to make another audit to bring these figures to the end of the fiscal year, it has been decided to present the statement as it stands, rather than have another audit, which would only comprise two additional months.

The members of the commission being mostly business men, at the very start of its activities submitted to the governor that, although wishing to have its finances and bookkeeping along the lines established by the Government, to assure a perfect audit of all its accounts, the work should be simplified and brought more in line with the practice of large corporations. The governor recommended an interview with the auditor, and at this conference Judge Bonner offered every facility to simplify the accounting and secure an absolute supervision of every item. The cooperation of the auditor's department to attain this end has been most successful, as will be seen by the report above referred to.

At its first meeting the food commission decided that the provision in the law for the issuance of bonds not to exceed \$1,000,000, for the financing of its activities, was not necessary at the moment, as it felt confident to be able to raise the requisite funds on notes. Mr. Turner was requested to make the necessary arrangements with the local banks, and their cooperation was so decisive that throughout the year all funds have been provided by these banks, on notes signed by the governor, the interest on which has been payable monthly at the rate of 4 per cent per annum. The principal is payable on any interest due date, so that the commission has had no concern in the matter of finances. All the money needed has been available on terms that are not only extremely favorable under prevailing conditions in this island, but at a rate that can not at present be equaled by any institution. Loans on these terms have aggregated \$1,185,000 to April 30, 1918, and \$735,000 of this amount has been repaid to the banks, leaving nine notes of \$50,000 each outstanding on that date, or a total indebtedness of \$450,000. (See Table B.)

The heavy charges for interest appearing in the financial statement of the year have been caused by the long time between the financing of the cargo of Saigon rice and the date on which the funds became again available; but the arrangements made last October in New York and San Francisco, by which interest is credited on daily balances, not only reduced the charge for interest, but places the present finances of the commission on a very favorable basis. To such an extent have these conditions improved that even at times when it is able to pay off its notes, it has preferred to allow them to remain unpaid and have the funds available for any unexpected emergency. As its funds have been reinforced by the profit realized on the Saigon rice, its daily balances have been large, and money has been drawing interest while awaiting disbursement against credits opened by the banks; so that the interest charges for the coming year should be greatly reduced, while the facilities of the commission have been trebled.

The arrangements made with banks in New York and San Francisco are the usual commercial credit transactions. These banks open irrevocable credits in favor of sellers of merchandise to the commission, and pay the amounts due on these credits as they become due and against shipping documents. The commission arranges to have funds available on deposit with the banks about the time the credits become payable, but it is allowed interest on its balances at 2½ per cent. The commission for these credits is one-eighth per cent on the sums actually paid by the banks.

There are other banking facilities which have grown out of the relations which the commission has been able to establish that are a great aid in securing low prices, and the most favorable terms in all its commercial transactions.

It has been a matter of congratulation that the expenses of the commission have been more than covered by its commercial activities, and that the \$500,000 realized on the Saigon rice have been kept intact, with the exception of about \$3,000, but even this is a saving of about \$15,000, as with the governor's consent the commission had voted \$40,000 for agricultural propaganda from the funds realized on the rice cargo, of which, as will be seen by the auditor's statement, about \$23,000 had been spent to April 30. The actual results from a financial point of view have been \$608,539.35 gross, but since \$34,850.36 have been contributed to the insular treasury in the form of customs duties which would not have been paid in, except by insisting on the shipment of the rice in bond to this island, the actual gross cash received by the island is \$643,389.71. Of this sum, expenses, duties, and the cost of operation of the commission have amounted to \$115,555.68, so that the net result in cash to the

Government has been \$527,834.03. Indirect results are more difficult to measure in dollars and cents, but taking a single item, rice, prices have been maintained at about 2 cents below the retail price in Louisiana, from where most of the rice consumed in the island is received, so that even on the basis of six months' reduction in the retail price of rice, it means \$1,500,000 saving to the consumer.

The prices on several important articles of daily consumption in the island have been reduced through the large production of foodstuffs here, so that it is reasonable to consider that a large saving has been effected to consumers. Comparison with articles that are uncontrolled will lead to a better realization of the saving effected on foodstuffs.

Of course, the Federal laws have, during the first four months of this year, greatly helped to attain this end, as the profits of wholesalers, principally, have been regulated under the Food Administration rules, while the commission has been able to reach retailers through the fixing of retail prices.

It may be well to say that the majority of the members of the food commission are averse to fixing prices where any other method can be used to attain the end of maintaining a reasonable range of prices, yet, even with these views it has found that no other method could be used at present.

Mistakes, of course, have been made, but every effort to correct these mistakes as soon as discovered has been used, and in the fixing of prices the commission has tried to be absolutely fair to the public and to the dealers.

#### AGRICULTURAL PROPOGANDA.

A report from Mr. Walcott's committee is hereto attached, and from the data it contains some idea of the enormous work done in this line can be obtained. The committee, as originally appointed, consisted of Mr. Walcott as chairman, with Mr. Camuñas, Dr. D. W. May, and Mr. H. C. Henriksen.

Mr. Henriksen being in charge of the Federal agricultural extension work on the island was later placed in charge of the field force, as organized, when a fusion was made of the activities of the Federal with the insular authorities as represented by the department of education and the food commission. The latter, with the governor's consent, agreed to contribute a fund of not to exceed \$40,000 for the expenses of one year, to September, 1918, which, together with the Federal appropriation of \$10,000, and the agricultural teachers of the department of education have been evolved into a combination which it is hoped has done and is doing work that will have a permanent effect on the future development of Porto Rico toward becoming largely a self-sustaining country.

Thirty-five agricultural agents have been assigned throughout the island, 10 of which were detailed by the department of education, and an active and personal propaganda has been maintained by them with the results that appear from the report of this committee.

The distribution of seeds through the municipal authorities and through the agents of the agricultural committee of the food commission assumed quite important proportions. The greater part of these seeds have been sold to planters, who pay for the seed at stated periods, dependent on the length of time needed for the particular crop. The value of the seeds handled through the municipal officers has been \$14,099.34, of which, to date, \$416.31 have so far been reimbursed, leaving \$13,683.03 outstanding. In addition, the agricultural committee purchased seeds to the value of \$7,864.14, as shown by its report, representing about 42 tons of various classes.

Of the results of the work of the agricultural agents it will be seen that up to April 30, 1918, the acreage planted amounted to 334,725 acres, while on that date there were 94,355 acres pledged for spring planting, an acreage which has since been greatly exceeded.

According to the treasurer of Porto Rico's report for the year 1916-17 the number of acres planted to minor crops was 102,575 with an average value of \$28.85 per acre, so that the increase represents 300 per cent of what was then planted.

In addition, 22,871 home gardens and 1,410 school gardens has been planted.

Great impetus has been given to this work by the formation of agricultural committees for propaganda throughout the island, and the interest has been maintained by holding agricultural meetings in the rural districts. Of the committees, 1,135 were organized, and 1,453 meetings were held to April 30, 1918. There are figures, however, that are more eloquent in showing the results of this propaganda.

By reference to the statistics contained in the appendix to this report, it will be seen that from May, 1916, to April, 1917, there were received from the United States in Porto Rico 239,859 bushels (13,432,104 pounds) of beans and dried peas, while for the corresponding months of 1917-18 the receipts were only 182,490 bushels (10,219,440

pounds) and although the difference in values is against the period from May, 1917, to April, 1918, by about \$2,780, this further brings out the saving, as the average price for the 1916-17 period was about \$2.47 per 100 pounds lower than for the following year; so that a saving of 3,212,664 pounds, at the price prevailing in 1917-18, would mean about \$793,850.

In the same period for the years 1916-17, beans and peas were imported from foreign countries to the value of \$84,227 and in 1917-18, \$131,169 were imported; while the exports to foreign countries and shipments to the United States of beans and peas in 1916-17 were valued at \$9,353 and in the same period in 1917-18 they were valued at \$44,806.

Considering that the statistics comprise beans, peas, and garbanzos and that we have only produced beans, a great saving is evident.

The effect of corn production is also evident in the statistics, where we find a saving in the importation of 45,337 barrels of corn meal in favor of the 1917-18 period, notwithstanding the fact, that in the last four months of this period the use of corn meal as a wheat substitute was general.

The value of corn and corn meal received from foreign countries in 1916-17 was \$13,515 and in the 1917-18 period \$70,675, while the value of shipments from Porto Rico have been respectively \$2,526 in 1916-17 and \$33,677 in 1917-18.

Comparisons with other products are difficult. As these are the two principal articles of import that we have been raising ourselves, the effectiveness of the agricultural propaganda may be gauged by these results, even though the figures contained in the report of the agricultural committee are sufficiently explicit.

As an evidence of the increased interest in all matters of production, it may be well to mention the discussion in favor of suppressing what was called the second crop of tobacco. There are many arguments pro and con, but the patriotic view of increasing foodstuffs prevailed generally, and hundreds of tobacco planters voluntarily dispensed with this second crop, and planted their tobacco lands with beans, corn, and other products.

Another matter in which results were evident was the propaganda in favor of increasing the number of corn mills. A power mill was installed by the food commission, at which any corn brought in was ground free of charge. Within two months some 200 mills had been installed throughout the island, and the conservation of the increased corn crop was better assured.

The closest cooperation has been secured between the agricultural division of the food commission and the educational division of the United States Food Administration, so that the work of propaganda is made easier.

#### MARKET DIVISION.

The food commission, impressed by the lack of facilities for the free distribution of local produce, owing to municipal regulations governing peddlers, and a tendency of growers to dispose of their produce to these peddlers, decided to make an experiment by erecting a free market, and by inducing the sale of produce in this market, as far as possible, direct from producers to consumers.

The district of Puerta de Tierra was selected for the building of this market, because it contains a larger proportion of population engaged in manual labor, and needing especially a place where it might purchase its foodstuffs at as low a price as possible.

This district was believed to be the best for a thorough trying out of the plan, and it was hoped that its benefits, if successful, would be reaching the class of people most in need of protection against overcharge in food.

The building was erected in a central location at a cost of about \$2,000 and has just begun to be used. It is too soon to express an opinion on results, except to say that the public is favoring the idea, and that the commission expects to have a fair chance to study the problem and, if successful, to extend these benefits further.

The city council of San Juan has offered a lot on the Pasco de la Princesa for the erection of a market place in the Marina district, and the matter is now in abeyance until the results of the experiment at Puerta de Tierra can be gauged.

There is a general demand from other towns for similar markets, but the food commission is giving the whole question of the marketing of local produce a comprehensive study, taking all circumstances into account as they actually exist, and no steps will be taken until all information on the subject has been carefully weighed.

The main question is to foster direct sales from producer to consumer, and the elimination of middlemen where no actual service is performed.



## EXPERIMENTAL FARM.

When it was learned that the training of our drafted men was to be in Porto Rico, and the site for the cantonment had been definitely settled, the food commission became quite concerned about the effect that the feeding of such a large number of men would have on the local supply of garden produce and vegetables in San Juan. Estimates were made, not only of the demand for such produce to be used in the feeding of the drafted men, but also on the floating population which it expected would be attracted to San Juan.

An active propaganda was started throughout all the towns and districts from which San Juan usually derives its supplies of this produce, with some success, but after a great deal of consideration of the matter, it was decided to start a farm that would contribute some additional source of supply.

The agricultural division was asked to select a site and after inspecting several parcels of land, it decided in favor of a place on the outskirts of Aibonito, which had several points in its favor, such as altitude, climate, suitable soil, a limited amount of irrigation and access to a good road. Its drawback was its distance from San Juan, which was the market principally to be supplied, yet it was believed that these products could always be disposed of, in the adjacent towns, and that even Ponce could be reached at a reasonable cost of transportation.

A lease of the land was made, and work was started by planting, in addition to patches of corn, beans, bananas and plantains, 38 acres in Irish potatoes and experimental plots of cabbage, cucumbers, melons, okra, carrots, peas, eggplant, wax beans, tomatoes, peppers, and other garden truck.

This farm is intended more as an object lesson than as a money-making venture.

## PUBLICITY.

A publicity committee was appointed under the chairmanship of Mr. Luis Sanchez Morales, of which Mr. José Labrador, Dr. Gomez Brioso, Mr. Eugenio Astol, Mr. Harwood Hull, and Mr. Abelardo de la Haba were members. This committee, in addition to securing the active cooperation of the press, submitted a number of suggestions which proved most valuable.

At present most of the publicity work is done in active cooperation with the Educational Division of the United States Food Administration.

This division, formerly known as the Publicity Division, was organized by Mr. Hiram C. Fisk, who patriotically volunteered for the work. Much of the success in bringing our people to a full realization that each man, woman, and child could do something personally toward "winning the war" is due to the highly efficient work of Mr. Fisk. His assistant, Mr. F. J. Rodil, succeeded him as chief of the division, and he has ably conducted the Educational Division since April, 1918.

## FUEL.

The United States Fuel Administration has no representative in the island, and the matter of the fuel supply of Porto Rico, although causing great concern to the food commission, has not been regulated, as in the case of food. The scarcity of charcoal, which constitutes our principal fuel, is making this a matter of greater importance daily.

The use of coal gas is restricted to two cities, San Juan and Ponce, while the tonnage situation makes the cost of coal, for this purpose, a real problem.

Almost one of the first matters confronting the food commission when it was organized was a shortage of coal, which threatened to close down the two gas plants on the island. In San Juan, where there were more than 3,000 users, it was a problem how to replace gas with charcoal, electricity, or kerosene. There were no facilities immediately available, but through the cooperation of the governor and the military authorities, it was possible to seize a cargo of coal then on an enemy prize, formerly the British steamship *Farn*. This coal was appraised and turned over to the gas company, the proceeds having been placed in a bank, subject to the order of the governor for account of the rightful owners. Sufficient coal was left in the ship to carry her to a northern port.

Complaints have been received of high prices charged for charcoal, and the commission has from time to time made purchases of this fuel for sale in an endeavor to regulate the price.

In one of the investigations started to ascertain the real causes of the shortage, in addition to the well-known fact that wooded lands are being depleted on the island.

it was discovered that large tobacco growers were using charcoal for maintaining an even temperature in their "ranchos." One company, the largest and only important user on the island, informed the commission that it had then on hand about \$20,000 worth of charcoal and that it used last year a similar quantity.

The commission appealed to this company to try some other fuel, but it was found that experiments proved that charcoal was the only fuel suitable for the purpose. An agreement was then made with this company for it to import the charcoal from the neighboring islands.

Under "Regulation" will be found further remarks in connection with the food commission's activities concerning fuel as regards to kerosene and gasoline.

#### UNITED STATES FOOD ADMINISTRATION.

During the visit of the chairman of the food commission to Washington last fall, in connection with the sale of the cargo of Saigon rice, he called on Mr. Hoover, at the request of the food commission, with the Resident Commissioner for Porto Rico, for the purpose of submitting to the Federal Government the interest of the food commission in the regulation of prices on rice, and to ascertain how the food-control act and the supporting situation would affect Porto Rico.

Mr. Hoover suggested the appointment of Mr. Lee as Federal Food Administrator for the island, provided the governor would so recommend. This offer was at first declined, with the suggestion that the appointment be made in the name of the food commission. This was found impracticable, and it was then suggested by Mr. Lee that the president of the food commission be appointed, thus assuring continuity in office. After consultation with Mr. Hallowell, chief of the States Administration Division, Mr. Hoover insisted that the appointment must be personal, and, upon recommendation by the governor of Porto Rico to the President, Mr. Lee was appointed.

The national work was started about the middle of November last, and it has proved of the greatest convenience that both the Federal and insular activities have been concentrated into one office.

The public has had the advantage of practically a uniform and cohesive interpretation of the laws, and even though the Federal act and the insular law do not in any way conflict their application has been simplified, and one has complemented the other.

It has been most satisfactory to the members of the food commission to be able to coordinate their activities with the national work, and it has been the aim of both offices to so blend all work, that the public has hardly been made aware of where insular work ended and national work began, and vice versa. Every member of the food commission is a member of the United States Food Administration in some capacity, and while many of the employees of the food commission are also volunteer workers in the national administration the employees of the latter are able to render valuable services to the food commission.

A division of these activities would have been very unfortunate, and might have led to conflict of authority and perhaps friction, which would certainly tend to lessen the effectiveness of both organizations, and the public at large would have suffered.

A duplication of work has been avoided, so that expense is reduced for both offices with an increase in efficiency. In fact, the national work has been so closely connected with the insular organization that this report will necessarily contain matters which, strictly speaking, appertain to the United States Food Administration, and no effort will be made to classify them separately, since both have the same end in view; the increased production and conservation of food, the prevention of waste and speculation, the regulation and stabilizing of prices, the transportation of supplies under proper supervision, and the elimination of the unnecessary handling of foodstuffs which adds to their cost with no corresponding service. It must, however, be borne in mind that the two laws are essentially different, in that the Porto Rico food commission was created, primarily, to assure a food supply for this island by increasing production and assuring transportation for foodstuffs, and the National Food Administration was intended principally for the purpose of providing a supply of foodstuffs for the allies.

Circumstances have extended the scope of both organizations in their efforts to carry out the purposes for which each was created.

In the matter of regulation and enforcement the methods are quite distinct. The food commission relies on the courts to deal with violations of its ordinances or resolutions, while the National Administration has a direct control over violators through its licensing system, leaving only very gross violations of the food-control act to be dealt with by the courts.

The Federal Food Administrator began investigations of violations in April, 1918 and, to June 30, had dealt with cases as follows:

*Cases acted on.*

Month.	Cases started.	Violations punished.	Filed as unimportant.	Closed for lack of proof.	Pending at end of month.
1918.					
April.....	112	5	18	14	75
May.....	69	15	17	23	89
June.....	15	2	22	10	70
Total.....	196	22	57	47	.....

The violators punished contributed \$2,300 to the Red Cross, \$100 to the Army work of the Y. M. C. A. and Knights of Columbus, \$1,260.53 to local charitable institutions, and over \$500 was ordered refunded to dealers who had been overcharged in violation of the rules. One retailer was made to donate his stock of flour to a local charity, and was prohibited from dealing in flour until after August 1, 1918. One baker in addition to contributing to the Red Cross, had his license revoked for six months. One bakery was closed for three days, another bakery was closed and its owner prohibited from applying for a license for one month, and another was thus punished for six months. The stock of flour of these two bakers was donated to a local charity. One bakery was closed for a week for using substitutes in smaller quantities than provided in the rules, and was further made to donate his stock of flour to a charitable institution. One wholesaler was closed for three days, in addition to making a large donation for charitable purposes.

These violations punished are classified as follows: For profiteering and violation of the general rules, 17, and for violations of the rules governing bakeries, 5.

The baking division, organized under Dr. Narciso Dobal, who volunteered his services, has endeavored to improve on the quality of "victory bread."

Experiments were made with many substitutes, and conferences held with leading bakers, after which recipes were published and questions were answered.

The work of Dr. Dobal has been highly appreciated by the commission.

The absence of Miss Grace Ferguson, head of the home economics division, although it has delayed results, promises for the coming year a new feature of conservation that will be far-reaching. Miss Ferguson's work in the public schools is too well known to need comment, and through her connection with the department of education she will reach thousands of housewives in a practical demonstration of what can be done to improve methods of cooking, to eliminate waste, and in the preparation of an economical ration that is scientifically balanced and tasteful.

The work will be extended in this division by frequent exhibits and practical propaganda along the lines the work is carried on in the States.

OFFICE BUILDING.

As stated in the general remarks on the organization of the food commission, its first meetings were held in the office of the Comisión Económica, on the top floor of the Intendencia Building, from whence it was moved to quarters in the Diputación Building.

In accordance with the arrangements made by the commissioner of the interior, these quarters were to be remodeled for the purpose of housing all the divisions of the department of agriculture and labor in one building. This rendered necessary the moving out of the offices of the food commission, and difficulty was encountered in securing suitable quarters.

When it was found that there were no suitable offices in any government building, efforts were made to obtain accommodation in a private building to be rented for the purpose, but this was a difficult matter as no building could at the moment be rented.

Learning that the Masonic Temple was for sale, and considering the price of \$30,000 that was being asked, reasonable, the governor's approval to its purchase was requested. For some time the governor hesitated until, on May 6, 1918, while the commission was holding the first session of the second year of its existence, the governor announced that he would approve the purchase of the Masonic Temple, in view of all the circumstances of the case and considering the immediate need of proper quarters for its work. It may be well to add that an appraisal of the building made by the

commissioner of the interior justified the price even exclusive of the value of the land, which is well worth several thousand dollars more, and the commission feels that when its work is ended this building will be found to be a good addition to the fine buildings belonging to the insular government.

On July 1, 1918, the commission moved into its new home.

#### REGULATION.

The law provides that the food commission shall have power to determine the prices at which all articles of food may be sold by private parties, and in exercising these powers the food commission has from time to time passed resolutions which have been enforced by the courts. Copies of these resolutions, as adopted to June 30, 1918, are appended to this report, and the commission believes that a better understanding of its policy will be arrived at by commenting briefly on the reasons which led to their adoption.

In making these comments it may be more convenient to group the resolutions by subjects where this is possible.

#### EXPORTS.

As will be seen in the remarks under "Commercial transactions," the first step taken by the commission in the matter of regulation was the resolution of May 11, 1917, prohibiting exports of certain foodstuffs.

#### RICE, FLOUR, AND CONDENSED MILK.

The first measure to fix prices was adopted on May 15, 1917 (Resolution No. 2), fixing maximum prices for the sale, at retail, of rice, flour, and condensed milk. The circumstances which led to its adoption have already been mentioned. On May 22, 1917, Resolution No. 4 was adopted amending the above, by granting an increase of 1 cent in the prices of rice, flour, and condensed milk on retail sales in rural districts and in the islands of Culebra and Vieques. The reasons for this are obvious—it was intended to be fair to the small retailers in isolated districts against a loss in the sale of their stocks on which transportation and distribution expenses had been higher than the average in large centers of population.

The purchase of a large lot of rice by the commission, the receipts of flour from new crop wheat, and a disposition to restrict shipments of condensed milk to the island led to the repeal of the said resolution on June 7, but a temporary classification of rice and a fixing of prices on this article up to June 24 were included in the new Resolution No. 5. The purchase of the Saigon cargo of rice referred to elsewhere in this report, and a belief that it could control prices by carrying a reserve stock, left all fixing of prices on rice free from June 24 to December 10, 1917.

However, in order to keep thoroughly informed of local market conditions, and to be in a position of preventing needless losses to the trade through excessive purchases of rice at a time when the commission was expecting a heavy shipment, led to the adoption of Resolution No. 6 on June 21, 1917. This called for reports from buyers and sellers giving particulars of all transactions in rice.

The measure was misinterpreted by the trade and was considered inquisitorial, while certain people even expressed the belief that the commission desired the information to protect itself against losses on its purchases of rice through advance knowledge of market conditions.

At the request of a committee of the Insular Chamber of Commerce, the resolution was repealed on June 29 by Resolution No. 7.

Being unable for military reasons to give out information as to the purchase of a cargo of rice in Saigon, as already explained, the commission, however, urged caution in purchasing rice before the new crop of rice became available.

The views of the commission were sustained by the facts, as the price of rice was maintained stable until September, when the stock of the rice of the food commission was exhausted, and a wild flurry of prices ensued, which called for prompt action by the commission, as soon as supplies became available from arrivals of new crop rice. From December 10, 1917, to May 20, 1918, the retail prices of rice were maintained by Resolution No. 17, at 8, 9, and 10 cents per pound for the three grades in which rice had been classified by the food commission, to wit: the whole grain, mixed but not less than 50 per cent whole grain and screenings, including rice with less than 50 per cent whole grain. Resolution No. 38 of May 13, 1918, provided that from and after May 20, 1918, the maximum retail prices for the three grades of rice are fixed at 9, 10, and 11 cents, respectively. This resolution is still in force.

This increase in price was brought about by the rise in the American markets, caused by the unprecedented demand for rice by the American people in the North, due to the inclusion of rice and rice flour in the list of wheat substitutes. So great has been this demand in the North that the importation of 3,000,000 pockets of Asiatic rice have been licensed by the War Trade Board at the request of the United States Food Administration, from May 1 to September 1, 1918, to fill the deficit in the domestic supply.

Though the rise in prices in the southern markets had caused a reduction in receipts of rice in the island, the food commission did not allow an increase in the retail prices until, according to statistics available, the stock of cheaper rice had been pretty well exhausted, when it was not only fair, but absolutely necessary, to secure new supplies, that the increase be authorized.

Profiteering by wholesalers who held lots of cheap rices, and under the Federal rules were obliged to sell within the lawful margin of profits, was controlled by the punishment of violators through the United States Food Administration.

#### FRESH MILK.

The next article to be controlled was fresh milk. It may be well to state that no article of food has given and continues to give more concern to the food commission than milk. This situation has been and continues to be governed by a scarcity caused by the planting of the best pasturage lands to sugar cane and a general degeneration of the herds. It has been proved that a fair average production of many dairies is 3 quarts per day per animal, while the most favorable returns seldom exceed an average of 4 quarts. The only solution to this problem seems to be a restocking by first-class specimens brought from other countries, but the difficulties attendant on a wholesale improvement in the cattle industry at a time when the whole world is facing a crisis in transportation and in every order of life are magnified considerably. It is a well-known fact that even with systematic planning and under normal conditions the dairy industry can not be developed in less than from three to four years, so that the food commission has had to content itself with taking such measures as circumstances demanded urgently while preparing a comprehensive plan for the future.

In May, 1917, just at the season of the year when the production of milk begins to increase rapidly, the commission found prices prevailing which varied considerably according to locality, but ranged from 10 cents to 24 cents per quart. Hearings were held at which dairymen and dealers in fresh milk were asked to give evidence and the problem was considered.

On May 18, 1917, Resolution No. 3 was adopted, and by this resolution the maximum price of milk throughout the island was fixed at 12 cents per quart at the milk stands from and after May 21, 1917.

In San Juan, where the milk problem is an ever-present bugbear, the result of this action was most unfavorable. Although against the law of weights and measures, it was customary to sell milk by the old Spanish "cuartillo," equal to about three-fourths of the American quart, which was the legal standard. The price at the milk stands when the resolution was adopted was 16 cents per "cuartillo," and a few days before the price was fixed some shops had reduced their price to 14 and even to 12 cents; the new price, therefore, not only cut the price from 16 cents to 12 cents, but increased the then standard measure by a third.

That a mistake had been made was evident, yet so unreliable was the information which had been given at the hearings, and so many tricks were resorted to by a few unscrupulous producers to evade the price fixed, that the commission decided to allow the price to stand, during the period of high milk production, unchanged. The result as far as San Juan was concerned increased deliveries by the producers from house to house, at a charge for delivery that in some cases was as high as the legal price at the milk stands, these producers obtaining as high as 24 cents for their milk, while a large number of milk stands began deliveries at charges varying from 4 to 6 cents per quart, in addition to the legal price of 12 cents for the milk. This withdrew a large quantity of milk from the public sale at the milk stands, and caused much hardship among the poorer classes, for whose particular benefit the resolution had been intended.

When the production of milk began to dwindle Resolution No. 3 was repealed, in respect to San Juan, by Resolution No. 8 of August 21, 1917. On August 29, 1917, Resolution No. 9 was adopted, fixing the price of milk from September 1, 1917, at 16 cents per quart in San Juan and Caguas, 15 cents per quart in Rio Piedras and Bayamon, and 14 cents per quart as a maximum in any other town on the island. These prices were for milk retailed at a dairy, milk shop, or delivered, the only exception that was made was for places where milk was consumed within the establishment.

It was later found that some dairies were turning a part of their milk into cheese and obtaining such high price for the cheese that the quantity of milk was so diverted

from the regular consumers. This led to the fixing of the price of fresh cheese manufactured on the island, by Resolution No. 19, of December 12, 1917, at 40 cents per pound at retail. Even though this was a reduction of almost 80 per cent from the prices then prevailing in certain sections, it was proved that this price yielded returns in excess of those produced by the sale of the milk, and in response to complaints which came in from all over the island, in which all classes participated, the price for the sale of cheese was reduced, from January 21, 1918, to 25 cents per pound, by Resolution No. 23 of January 17, 1918.

At this price a return was obtained from the conversion into cheese of any surplus milk or milk accidentally soured, since it was better business to market the fresh milk than to convert it into cheese.

Many dairymen, and even some mayors of towns, had claimed that one of the principal causes for the high price of milk was the expense required by the sanitary regulations for the proper equipment of a dairy, and that these regulations added considerably to the cost of transporting the milk.

The matter was referred to the proper authorities, but without success, as the commissioner of sanitation felt that he lacked the authority to suspend any rule. Finally the governor's assistance was requested, and on December 26, 1917, the insular board of health adopted what were called emergency regulations, by which the commissioner of health was authorized to suspend such regulations as might be approved by the insular board of health, and upon the request of the food commission, when it was believed that this would assist in increasing food production. The measure was approved by the executive council on January 2, 1918, and was duly promulgated by the governor on January 8, by administrative Bulletin No. 134.

On January 12 a formal request was made by the food commission to the commissioner of health, in accordance with said ruling, for the suspension of certain regulations.

On January 23, at a meeting of the insular board of health, the chairman and secretary of the food commission were invited to appear, and the matter was thoroughly discussed, the result of the hearing being a modification of the rules to conform with the request of the commission on almost every point.

The public health was safeguarded, and by a frank discussion of the matter the thorough cooperation of the sanitary authorities was secured.

The result expected from the change was that small cattle owners could market their product under reasonable conditions of cleanliness and sanitary precautions, but without having to go to any large expense.

At that season of the year it was difficult to appreciate any immediate increase, and the commission, without waiting for the insular board of health to take this action, was forced to adopt radical measures, in view of the urgency of the case, and to relieve actual suffering, by children and by the sick, especially among the poorer classes in the larger cities, particularly in San Juan.

This led to the adoption of Resolution No. 22 on January 16, 1918, prohibiting the sale of fresh milk in any form in hotels, restaurants, clubs, and other public places. This prohibition included the use of fresh milk in the production of ice creams, milk shakes, creams, coffee and milk and custards, in such places, so that all public eating and refreshment places in towns where the retail price of milk was over 12 cents per quart, must use condensed or evaporated milk.

Relief was immediate, and the supply of fresh milk for domestic use throughout the island was ample, even though the season of production was at its lowest ebb.

So well was this measure received by public opinion, that at the urgent request of the mayors of many towns, where milk was selling at 12 cents, and where consequently the prohibition of its sale in public eating and refreshment places was not applicable, a Resolution, No. 25, was passed on January 30, extending this measure to all towns and cities where milk was sold at 12 cents or more per quart.

After this period the policy of the food commission, as to fixing the price of milk changed, and the local conditions of each municipality were given consideration, regardless of the problem as affecting the whole island, and each town was consulted and a price fixed as requested by a resolution adopted by the municipal council. All these changes in price were embodied in Resolution No. 27, of February 6, 1918, where a complete schedule of prices is fixed as follows: A price of 6 cents per quart was fixed for the Island of Culebra, 8 cents per quart for seven towns, 9 cents for one town, Quebradillas, 10 cents for 18 towns, 11 cents for three towns, 12 cents for 34 towns, 14 cents for 5 towns, 15 cents for 4 towns, and 16 cents per quart for Rio Piedras, San Juan, and San Lorenzo. This practice has since been followed, and changes made locally, at the request of the local authorities, with the exception of San Juan, where the municipal council has left the matter to the food commission, and declined to express any opinion thereon.

A legal quibble by which a violator of Resolution No. 25 was acquitted, led to the correction of an error in the wording, by Resolution No. 36, of May 13, 1918, in which the sale and serving of fresh milk in the public places was included in the prohibitions enumerated in the former resolution.

The latest resolution on milk was adopted on June 15, 1918, by Resolution No. 40, effective from June 19, by which the price of milk in San Juan was fixed at 12 cents per quart at the milk stands, and 14 cents per quart delivered at domiciles.

This measure was adopted, after a special committee, consisting of Mr. Sanchez Morales (later represented by Mr. Walcott) and Messrs. Abelardo de la Haba, and Ernesto López Díaz, had given due consideration to the matter of milk supply for San Juan. Among other matters contained in its report to the commission, the committee divides the periods of supply into a maximum period, from May to August, a medium period from September to December, and a minimum period from January to April. It recommended a scale of prices at retail for each period as follows: Twelve cents for the period of maximum production of milk, 14 cents for the medium, and 16 cents for the minimum.

It may have been due to the coincidence of the dengue epidemic, which caused an enormous demand for milk about the time the resolution was adopted, as it is said that an average of 8,000 cases were under treatment for a while, and that a milk diet was one of the first medical prescriptions, but the fact remains, that just before the adoption of the resolution, there was a surplus of between three and four thousand quarts daily at the shops, and immediately the price was reduced, these shops had a supply inadequate to the demand, and the pitiful scenes of a year ago were repeated at the milk stands, when police protection was necessary to organize the distribution of milk.

The commission has consulted with the department of health as to the practicability of classifying milk according to its butter-fat content, and this phase of the matter will be studied for the double purpose of protecting those producers who are improving their herds, and giving the consumer the privilege of paying for milk on its value as a foodstuff, and not having a fixed price regardless of what it is receiving in exchange for its money.

The milk problem will continue to have the best attention of the food commission, as the solution is as distant as ever, and no permanent relief can be obtained until the production is fostered to a point where the supply exceeds the demand.

Hotels and public places with dairies for their own use, consisting of cattle especially introduced into the island for the purpose, are allowed to serve milk in any town.

The food commission will encourage and assist in the introduction of good milk cattle into the island, as far as its resources may permit, and following the formulation of a definite and comprehensive plan that will promise permanent relief in the insurance of a supply of pure milk.

While some Holstein-Friesian cows on the island have been giving a daily yield of as high as 30 quarts, and a fair average yield for crossed native and Jersey cattle is 10 quarts, the average yield, as stated before, is very low. By increasing the yield per cow through improved breeding, a smaller number of cattle will be needed to supply the island with milk, so that less pasturage land will feed our milk herds.

The success of cattlemen in acclimating imported cattle has been discouraging, yet at least one important cattle raiser has been able to raise some very fine specimens, and has made them immune to tick infection.

As will be seen by the report of the agricultural committee, an active propaganda for the eradication of ticks has been started. It has been shown that it is possible by systematic dipping of cattle that a country can be freed from this pest. The matter is sufficiently important for legislative action, yet the commission is trying by its propaganda to bring the truth before the cattle owners in hopes that at least a fair start can be made by private initiative in building dipping tanks.

Another matter in connection with the milk supply has been the proposed introduction of goats of good breeds for crossing with the native stock. It is believed that in this manner a large number of milk goats of high quality could be gradually distributed throughout the country which would yield a sufficient supply of milk to relieve some of the demand for cow's milk.

It is also hoped, if the plan is successful, that these goats will be owned by poorer dwellers in rural districts, and that the value of this milk as an increase in their food supply may be quite important.

There are difficulties of many kinds to be overcome, and so far it has been impossible to obtain any specimens to start the experiment, but the commission is still hoping to succeed in this attempt.

#### BREAD.

The regulation of the sale of bread was not attempted until October, when by Resolution No. 10, of the 9th of said month, it was provided that from and after the 15th

of October, 1917, the maximum price at which bread or rolls should be sold in seaport towns and those along a public service railroad was fixed at 10 cents at the bakery, or 12 cents per pound at stores or delivered. The price at all other towns was fixed at 11 cents per pound at the bakery, and 12 cents delivered or at stores. The bakers were relieved of the custom of taking back unsold bread, but at the same time they were obliged to sell at the bakery in any quantity to such purchasers as called for bread or rolls.

The new crop of wheat flour had, according to ancient practice, been sold to bakers and dealers on the island for delivery in weekly or monthly lots covering a long period. Prices had declined in the north and this flour sold ahead was arriving and was being paid for at prices considerably in excess of the ruling market price.

The immediate circumstances which led to the fixing of prices for the sale of bread were that a complaint was received from the mayor of Ponce that the price of bread was 16 cents per pound. A conference with Mayor Yordán Dávila, led to his being empowered to hold a hearing in Ponce on behalf of the food commission, to investigate costs of bread manufacture, and in the event that collusion among the bakers were discovered to obtain evidence which would form the basis for a criminal prosecution.

He was further authorized to inform the bakers that, unless a fair price were agreed to, the food commission would commandeer all the bakeries in Ponce and arrange to manufacture bread and distribute it.

At the same time an investigation was started in San Juan, and although the bakers at Ponce agreed with the mayor to voluntarily reduce their prices to 10 cents per pound, it was found that, on the whole, the prices as fixed in the resolution were remunerative to all modern bakeries, where the average daily manufacture was in excess of five bags.

While it is generally known, and even though it is a criminal offense under the statutes, that there are a number of bakeries on the island, which are rented to competitors who have thus secured a monopoly in a town or in a section of a town, it has not been possible, apparently, to bring such violators of the law to punishment, as there are many ways of evading the law. The fact remains that the number of bakeries that are closed is large throughout the island, and although the commission is not in favor of having them opened, as it believes that there are still too many bakeries working, the commission feels that, in fixing the price for bread, it must, in the public interest, disregard the costs of manufacture prevailing in the smaller establishments. These costs are excessive, since the overhead expenses must be borne by a small daily output. It would seem desirable that bakeries unable to work less than 10 bags of flour per day at a profit should be discouraged. Competition of many small bakers in localities unable to support them has resulted in higher prices, as in the end one side concluded that it was better to pay the other a high rental for its bakery, and as soon as this unhealthy competition was eliminated prices were increased, and the public paid the rental many times over.

The commission knows that the prices it has fixed for bread, at the then prevailing costs of flour, have been unremunerative to a majority of the bakers, but it knows of some cases where silent bakeries, that had been rented to competitors, have been turned over to their owners, and this item of expense eliminated.

When the federal food laws became generally applied here, the commission had to consider a slight revision of its rulings to make them coincide with the Federal law, with the local law on weights and measures, with the sanitation regulations, and with the customs of the people.

Resolution No. 24 of the 17th of January, 1918, was adopted for the purpose, and the reduction in the cost of flour was also a reason for amending Resolution No. 10. The new measure fixed the price of a pound loaf, or of multiples of 1 pound, at 9 cents per pound at the bakery in towns connected by rail or seaports, and at 10 cents at other towns. The price of 10 cents per pound was fixed for rolls of from 1 to 3 ounces, even though joined together, for sales at the bakery in railroad and seaport towns, and 11 cents per pound at other towns. For bread sold at stores or delivered the prices were fixed at 11 and 12 cents, respectively, for pound loaves or rolls, regardless of the class of towns.

#### WHEATLESS DAYS.

The seriousness of the wheat situation throughout the world and the recommendation of the United States Food Administration led to the adoption of Resolution No. 16, on December 8, 1918, declaring Wednesdays as wheatless days, and on February 6, 1918, Mondays were also declared to be wheatless days by Resolution No. 28.

On February 19, by Resolution No. 32, the manufacture of wheat products was prohibited from noon on the day preceding a wheatless day until 10 p. m. of the



wheatless day. This measure was adopted to prevent as far as possible the purchase of a sufficient quantity of bread on the day preceding a wheatless day for use on such days, in violation of the spirit of the regulation.

As in the case of milk, it was necessary to adopt a resolution (No. 37) correcting an error, when it was found that a violator escaped punishment through a technicality.

#### MEAT.

The meat problem of Porto Rico is more complicated than would appear at first sight, although at the bottom of the trouble the same causes which have been pointed out in regard to milk apply to meat, with the additional demand for cattle for agricultural purposes which, while not lessening the supply of beef cattle, tends considerably to raise its price.

The meat consumed on the island is very poor in quality, as there is no cattle raised primarily for beef purposes. Old overworked oxen, fattened in some cases, but generally in their naturally poor condition, heifers unsuited for breeding purposes, oxen with horns broken that render them unfit for the yoke, and old cows that are unproductive, constitute the basis of this supply. The high prices which have prevailed and the low wages of the mass of the people have made beef an article of luxury, while in quality it is detestable, except in the smaller towns, where only a small head is killed once or twice a week. From a cattle country with a breed of cattle that was known throughout the West Indies, to which islands large quantities were exported annually, Porto Rico is facing a situation of having to import its meat supply unless some action is taken promptly. The British garrison in St. Lucia and other islands was formerly supplied with beef from Porto Rican cattle, and in the quartermaster's bids it was specified that this quality of beef must be supplied.

Large shipments were sent to Cuba and Santo Domingo, and formed the nucleus of the present cattle supply of said islands.

The rise in the price of lambs and the extension of sugar cane and other products has left only inferior pastures for the support of our cattle, with the exception of a few localities on the south coast.

The cattle business and the meat supply of the island are surrounded by a number of drawbacks, which not only increase the price but also tend to decrease the supply. It is claimed, for instance, by some prominent cattle raisers, that whereas sugar lands are taxed and the crop is not, pasture lands are taxed as well as the cattle raised on them. They consider that the cattle is really the crop of such lands and should be tax free. They further claim that when they kill this cattle for meat there are a series of petty taxes which increase the cost considerably—a tax for using the municipal abattoir, a tax for selling the meat in the municipal market place, a tax of 1 cent per pound, and other charges of a similar nature. From time immemorial a small clique has formed around each municipality that controls the supply of fresh meat, and when outsiders try to invade their territory competition of a ruinous nature is started, which discourages any repetition of the attempt.

The methods adopted by these cliques are varied, but accomplish their purpose. In most cities and towns the markets are municipal property, and charges are made for the use of space in same, which originally were intended to cover the interest on the investment. The demand for space as the cities grew increased until by leasing the markets they actually became a considerable source of revenue to the municipal funds. It is well to say that an attempt to protect the public was made by inserting in the lease the maximum rates to be charged for the different stalls, yet it has been found that, at least in one case, a lessee was found willing to pay a very high rental and confessed that he made a loss, yet year after year he would outbid all competitors for the leasing of the market place. As lessee he controlled the meat stalls and, as that was his principal business, he was able to recoup any loss made on the rental by eliminating competitors.

The food commission is strongly opposed to the leasing of market places while the present circumstances of food shortage and high prices exist, yet it is but fair to say that the municipalities have no way of compensating for the income which this rental yields.

The municipal councils and the legislature, even the food commission, have tried to correct this situation by legislation and ordinances, which have been unsuccessful or have succeeded in a small measure only.

The result of all this has been a small meat consumption, in reality a decreasing meat consumption, as evidenced by the fact that the city of Ponce, with double the population of the years which preceded the American occupation, is consuming less meat at present than in the period preceding the Spanish-American War.

This condition exists throughout the whole island, although not to so marked a degree in San Juan.

Federal legislation prevents the importation of cattle from foreign countries, owing to quarantine and inspection restrictions, and the food commission has been vainly trying, with the active cooperation of the governor and of the Resident Commissioner for Porto Rico in Washington, to have these restrictions modified by Congress. It believes that the importation of cattle would only be necessary for a short time, and that the cattle industry would in the end be improved, while the supply of meat would not only be increased but cheapened.

After considerable correspondence by the governor and repeated efforts by the Resident Commissioner for Porto Rico in Washington, the attorney for the department of agriculture rendered an opinion that commerce between Porto Rico and the Virgin Islands of the United States was now interstate, and that therefore importation of cattle might be made here from these islands without objection.

To prevent the possibility of introducing cattle diseases into this island, it was decided to handle the matter as between the naval government of said islands and the governor of Porto Rico, who appointed the food commission and the department of sanitation, to supervise such importations, and arrangements were made for inspecting a trial lot purchased by the commission.

The cattle was received and sold for slaughter, but cattle raisers in the islands were not satisfied with the price the commission considered convenient and no further shipments were made. The commission then arranged to facilitate direct dealings between the cattle raisers and local interests, and one shipment of 50 head of cattle was made to Ponce, the understanding being that up to 25 per cent of work cattle would be allowed on each shipment, the balance to be for slaughtering purposes.

When this business was started, the cattle raisers in the islands were facing a heavy loss, due to the drought which prevailed for several months, but as rains started about the time the first shipment was made, they have been attempting to secure even higher prices for their cattle than local raisers are getting.

In any case, the supply in these islands is too small to affect our local market to any marked degree.

The legislature, at its last session, passed a law which the commission believed would tend to improve the situation locally, but results so far show that the cliques above referred to continue to control.

An experiment made by the food commission in loaning the municipality of Juncos \$1,000 for the purpose of providing the town with meat, while encouraging, in that the regular dealer made a considerable reduction in his price by an agreement with the municipal authorities rather than have them start in their experiment, has otherwise been inconclusive.

Loans of a similar character have been made by the commission to the municipalities of Vieques and Arroyo, the result being still to be seen. In the local handling of these situations, the personality of the mayor counts for much, and in the three towns mentioned the alcaldes have given proof of their public spiritedness, so that it is hoped that a fair chance offers to test the matter of supplying the town directly by municipal service.

On November 14, Resolution No. 11 was adopted, fixing the maximum price of fresh meat in San Juan at 42 cents per kilogram, for meat with 25 per cent of bone. Complaints continued to come from all over the island of rising prices, scarcity of cattle, and general dissatisfaction with the outlook, as cows were being killed in great numbers owing to the high price of work animals, so that after several hearings at which contradictory evidence was given by the different interests, the commission, in order to have the matter fairly under discussion, and trying to get at the best method of attaining the end, adopted Resolution No. 14, on December 1, 1917, by which the slaughtering of female cattle was restricted to one for every five head of male cattle slaughtered in each locality.

This raised a storm of protest on one side and of approval on the other, but the commission was able to ascertain from the discussion which followed that its ends could be gained without such a radical measure; so on January 4, 1918, it repealed this resolution, by passing another under No. 21, by which only female cattle unsuited for breeding purposes could be slaughtered, and each town must pass on the cattle killed through its veterinarian and a delegate of the mayor.

A further rise in the price of cattle, and the fact that the municipality was empowered to act in the matter by the late law of the legislature, joined to a refusal of the meat suppliers to continue furnishing meat in San Juan at the price fixed, caused the repeal of Resolution No. 11, on February 6, 1918, by Resolution No. 26. No further regulation of meat prices has been made.

## MEATLESS DAY.

Following the recommendation of the United States Food Administration, the commission had requested the mayors of all towns and cities to fix a meatless day in their municipalities. By general consent Friday was selected, but was not very generally observed, so that on December 3, 1917, Resolution No. 15 was adopted, fixing Tuesday as a meatless day by ordinance. The change was made to have the same day as had been selected by the United States Food Administration. The scarcity of meat in the island has not warranted the withdrawal of this resolution, which is now faithfully observed.

## SALT FISH.

As an instance of the methods adopted by the commission to obtain for the public the benefit of a reduction in price of foodstuffs, whenever possible, the circumstances which led to the adoption of Resolution No. 12 are typical. The imports of salt fish in the month of September had exceeded by over a million pounds the normal amount; and as this is a perishable article, the holders were experiencing not only a loss on the prices they were obtaining, but they were also facing a positive loss, by the spoiling of a large quantity of their stock, due to climatic action.

Application was made to the food commission by a large wholesaler for approval of an export license for a part of his stocks, and this was denied. Representations having been made that the holding of the fish here would not increase our supply, since it would spoil before there was a market for it, led the commission to further investigate all the facts.

The wholesaler was informed that the commission did not feel that it could allow the fish to be exported, as this amount of relief on the pressure made by the excessive stock would result in increased prices. It was finally agreed that the wholesaler would sell the balance of his stock of fish, and of four cargoes then on the way, at the then prevailing price, and to assure the benefit of this price to the consumer the retail price of salted or dried pollock, hake, and cod was fixed throughout the island at 11 cents per pound, in towns connected by rail and seaports, and at 12 cents per pound elsewhere. This was done by Resolution No. 12 of November 21, 1917, and when stocks were again normal, and the cargoes in question had arrived and been sold, the commission withdrew these prices by Resolution No. 18, of December 12, 1917. As the retail prices at the time the resolution of November 21 was adopted were from 14 to 18 cents, the public was given the benefit of a substantial reduction while the special conditions of the market prevailed, and the trade was reestablished on its normal basis as soon as these conditions had ceased.

## FRESH FISH.

Local prices of fresh fish have been gradually increasing, due, in part, to meatless days, and, in part, to a short supply, and the commission was obliged on December 1, 1917, to adopt Resolution No. 13, fixing the retail price of fresh fish in San Juan at a maximum of 15 cents per pound.

On February 18, 1918, it became necessary to amend the above resolution by another, No. 30, by which fresh fish was classified into two groups, according to quality and size, and the prices for each group fixed, respectively, at 18 cents and 14 cents per pound. A reclassification was made by Resolution No. 34, on March 5, 1918.

## CORN AND CORNMEAL.

Resolution No. 31 of February 18, 1918, fixing prices for the sale of corn and corn-flour was suspended before it reached the public, owing to representations made by the agricultural division to the commission in connection with securing a supply of the best seed obtainable. It was not found advisable or convenient later to fix these prices and the resolution was canceled.

## LIST OF PRICES.

Resolution No. 35 of April 15, 1918, provides for the posting of the maximum prices at which dealers sell foodstuffs in a prominent place in their place of business. There were some strenuous protests, but it was decided to give the plan a thorough test, its object being in the nature of avoiding overcharges and facilitating the gathering of reports on prevailing prices.

## SUGAR.

Late in the sugar season of 1917, efforts were made by the food commission to encourage the production of washed sugars for local use to do away with the refined sugar. Its object was not only to cheapen the article to the consumer, but to retain in the island money that was sent out to pay for refined sugar, and to save tonnage used in transporting the raw sugar north and then to bring back again the same sugars refined.

At that time it was too late to obtain results, as the crop was nearly finished, and sugar centrals claimed that their juices were not suited to manufacture a good grade of washed sugar.

When the present crop started, however, and the restrictions in its shipment were known, due to inadequate transportation facilities, there was a decided inducement to produce a high grade of sugar, since it could be readily turned into cash, instead of having to be stored for shipment throughout a 10-month period from February 1, 1918, with consequent losses in weight and polarization, storage and insurance expenses, and loss in interest.

Those centrals that were able to produce a good grade of washed sugar began early in the season to do so, and gradually improved their output until there was placed on the market a product, that to all practical purposes, displaced refined sugar. A sample of washed sugar that had been dried in a granulator was submitted to this office, which was not only quite white in color but polarized 99.6°.

Based upon price fixed in the north for raw sugar, the food commission, on January 4, 1918, after several hearings at which producers and dealers gave evidence, adopted Resolution No. 20 fixing the retail prices of five grades of sugar at 6, 7, 8, 9, and 10 cents per pound.

The United States Food Administration rules for the sale of sugar at wholesale had meanwhile been fixed, and it was thought fair to revise these prices to conform with said rules, so that the retailer would be allowed the margin of profit fixed by the Federal rules; and on February 18, 1918, Resolution No. 29, repealed Resolution No. 20, and fixed retail prices of sugar throughout the island at 6, 7, 8, 9, and 10 cents per pound, according to grade. Immediately this resolution was published representations were made to the commission that about 110,000 pounds of refined sugar had been bought in the United States and had arrived, and as the buyers had based their purchase on the retail prices fixed by Resolution No. 20, the commission thought it only fair to allow them to dispose of this small amount suspending, by Resolution No. 33, of February 26, 1918, for 30 days, the price of 8 cents per pound for granulated sugar, and allowing this grade to be retailed at 9 cents per pound for stocks actually on hand and, as stated above, for a period not to exceed 30 days.

The prices have been maintained without complaint throughout the season.

## SINKING OF S. S. "CAROLINA."

On June 2, 1918, the sinking of the steamship *Carolina* by an enemy submarine brought to Porto Rico a full realization of the fact that we were vitally concerned in the war. This steamer, with passengers on board, was sunk within 100 miles of Sandy Hook, and several lives were lost. At the same time another steamer, the steamship *Trzel*, with sugar from Porto Rico was sunk and for several days reports were received of ships sunk on the American coast, which, though of slight importance to the final outcome of the war, created a certain uneasiness as to assuring a supply of foodstuffs in the island. The food commission had been several times concerned about the effect of just such an emergency, and had not only prepared for action, if the emergency should arise, but had, through its constant propaganda, obtained a large increase in local crops. In November, 1917, the possibility of such a contingency had caused considerable uneasiness to the members of the commission, as stocks on the island at that time were at the lowest ebb, but, coming when it did, the commission felt reasonably sure of being able to take care of the situation, provided hoarding was not resorted to by merchants and consumers.

The governor held a conference with the authorities immediately after receiving news of the sinking of the *Carolina*, and Mr. Turner, as acting chairman of the food commission, in Mr. Lee's absence, attended. The telegraph service of the insular government was placed at the disposal of the commission for three hours, and the news was kept secret until this time had elapsed. Mr. Turner called a meeting and immediate action was taken.

In each town the mayor was appointed as agent for the food commission, and the sale of foodstuffs in quantities exceeding the normal purchases of consumers for a day was prohibited. Wholesalers were required to have their sales approved as to

quantity by the mayors of their respective towns, who were to exercise their discretion in these approvals to guard against hoarding. Later, consumers were allowed to purchase a week's supply, provided this had been their practice, and the sale was approved by the mayor.

Within three hours the entire stock of foodstuffs on the island was under the absolute control of the commission, sales were regulated, and profiteering and hoarding were avoided.

The stock of foodstuffs in wholesalers' hands on June 5, 1918, was—

Rice.....	pounds.	18,733,222
Sugar.....	do.	18,023,538
Starch.....	do.	1,118,508
Oil.....	do.	286,633
Codfish.....	do.	509,020
Onions.....	do.	23,685
Peas.....	do.	43,361
Kidney peas.....	do.	29,359
Native green peas.....	do.	132,900
Chick peas.....	do.	188,031
Choice chick peas.....	do.	132,065
Crackers.....	do.	94,959
Wheat flour.....	do.	1,322,640
Corn meal.....	do.	1,006,876
Beans.....	do.	3,167,242
Oats.....	do.	83,055
Ham.....	do.	277,624
Milk.....	cans.	1,057,506
Coffee.....	pounds.	1,589,849
Corn.....	do.	1,291,237
Lard.....	do.	1,655,957
Butter.....	do.	64,509
Herrings.....	do.	175,914
Mortadella.....	do.	243,588
Potatoes.....	do.	126,906
Pork.....	do.	570,465
Jerked beef.....	do.	26,824
Alimentary paste.....	do.	89,222
Cheese.....	do.	7,591

The enormous labor this plan entailed may be gauged by the fact that during the first week the plan was in effect, over 40,000 permits had been issued for sales of foodstuffs.

Telegrams sent and received by the office of the food commission exceeded 170,000 words in June.

#### GASOLINE AND KEROSENE.

In a few days it was found that gasoline and kerosene were being hoarded by private parties, and that the price had risen from 48 cents per gallon to as high as 90 cents per gallon, and the commission was forced to act at once, which it did on June 11, when, by Resolution No. 39, a maximum price of 55 cents per gallon on railroad towns, and 56 cents at other places were fixed for gasoline and the maximum prices for kerosene were fixed at \$2.50 per case of 10 gallons on coast and railroad towns, and \$2.55 at interior towns. Sales were restricted to the regular customers of each dealer, and the sale in quantities in excess of daily requirements were subject to approval by the food commission. A recommendation was inserted that cars and motor boats be not used for pleasure purposes.

Owing to the difference in the cost of transportation it was found necessary on June 13, to make the price of gasoline 55 cents per gallon, plus cost of transportation, and the price of kerosene \$2.65 per case, plus transportation charges.

The receipt of large supplies of gasoline and kerosene made these measures unnecessary after June 19 when, by Resolution No. 41, the prices and restrictions were withdrawn.

The right of the commission to fix the prices of fuel was therefore established, and the attorney general rendered a written opinion interpreting the law as including fuel (and consequently gasoline) with foodstuffs in the matter of regulation.

Although the commission had acted on this assumption early in its activities, as will be seen by reference further in this report to the matter under a special heading, there was some doubt as to the full intent of the law, and it is now satisfied that it can act for the protection of the public in the control of an article, which is just as vital as any foodstuff, and the cost of which is reflected on the cost of foodstuffs most directly, as its use is rapidly assuming importance in transportation and agriculture on the island.

<sup>1</sup> There were 25,000 pockets additional of rice, belonging to the food commission not included in the foregoing list.

## PRICE CONTROL.

From the first week in July, 1917, a systematic compilation of retail prices throughout the island was started. The insular police chiefs have sent in weekly the list of prices in their districts for 64 articles of prime necessity. These have been tabulated by municipal districts, and where differences were noted that needed explanation, the attention of mayors was called to the fact.

In this manner many high ranges of prices in a given locality have been reduced to a fair average.

Where the overcharge was reported on an article for which the price had been fixed, the police were asked to make a further investigation and, if the circumstances warranted, to file complaints with the courts.

For purposes of comparison retail prices prevailing on the mainland have been included in Tables X and XI of the Appendix, and it may be interesting to note that our local prices have been in many cases lower than those which have prevailed in the north, even on articles produced there, which have had heavy transportation and distribution charges in bringing them to the island.

While the local retail prices represent the weekly average for the 76 municipal divisions of the island, it is fair to say that, in the larger cities, prices on certain products have been in a large measure above these averages.

## ENFORCEMENT.

The insular courts have dealt with 205 cases of violations of the resolutions of the food commission, of which 160 have resulted in convictions and 45 in acquittals. Punishments have ranged from fines of \$1 to \$10 and costs, with alternative prison sentences of from 1 to 10 days. In one case, one day of imprisonment was imposed. The courts of Carolina and Río Piedras report no cases for violation of the food law. The food commission has, however, relied more on the force of public opinion for the enforcement of its regulations.

In conclusion, on the subject of regulation, it may be well to refer to the action of the Federal food administrator under the national law, as the United States Food Administration has greatly helped in giving the food commission a better control of violators than would have been possible, if dependent on the enforcement of its own resolutions. These matters are covered under a separate chapter.

## FISHERIES.

It is generally conceded that the waters surrounding Porto Rico teem with good fish, and the commission took up the matter of encouraging an increase in the sale of fish with the greatest interest.

These efforts have met with little success, and the scarcity of fresh fish has led to the fixing of prices for its sale in the city of San Juan.

The bulk of the supply for San Juan comes from the waters near Culebra, Fajardo, and Humacao, whence it is transported by motor trucks, refrigerated. One refrigerating plant has been installed in San Juan to preserve the catch until sold, but the quantity brought in is small, and therefore prices have been maintained too high to make fish an article of general consumption.

One fisherman claims that the public idea of a superabundance of fish in our waters is exaggerated or that sharks and other predatory fish are responsible for the small catch.

The commission, however, has arrived at the conclusion that there is a lack of knowledge of the business, and that there are too few fishermen who make fishing their regular business. It has therefore been endeavoring to obtain the assistance of the Bureau of Fisheries, through the Resident Commissioner for Porto Rico at Washington, who has presented a bill to Congress bearing on the subject.

That fish abound in the waters of the east west, and south coasts is unquestionable, and further efforts will be made to induce competent fishermen to develop our fisheries on a commercial basis.

It is a curious fact that our people receive from other countries preserved fish to the value of over \$2,000,000, and yet fresh fish is only consumed in coast towns to any great extent.

## PERSONNEL.

Being unfettered by a budget of expenditures and unrestricted as to the compensation it thought proper to assign to its employees, the food commission has been able to secure the services of the best and most efficient employees available. All

appointments under the law must be submitted to the governor for approval, and in no case has the governor made any objection either as to the individual proposed or to the salary fixed by the commission.

There was great difficulty at first in obtaining the services of suitable men, as the demand for efficient men was not only active in the government circles, but also in business offices. In many cases men were secured only by offering them higher pay than they were at the time receiving, but in every instance was this increase justified.

The merits of the individual were the only consideration, and while those that did not measure up to the standard set had their services promptly dispensed with, all those who exceeded expectations received due recognition by promotion. This has resulted in the formation of a personnel that is not only loyal and enthusiastic for its work, but that works while there is work to be done, regardless of regular office hours.

It may be well to say, however, that salaries have been maintained on the same basis as in other government offices for similar work, yet the personal work of many of the commissioners, which is given without any compensation, tends to reduce the cost in general.

The food commission takes great pleasure in recognizing the efficient and loyal aid it has received from all its personnel.

#### PORTO RICO PRODUCERS COMMITTEE.

The United States Food Administration and the Shipping Board appointed a joint committee on transportation for the West Indies, to which was entrusted the movement of all sugars from the West Indies to the United States. This committee appointed subcommittees for Cuba, Porto Rico, and other islands, and Porto Rico was represented by Mr. Lee, as Federal food administrator, and Messrs. John Farr and F. Dillingham, Mr. Lee having been elected chairman. The activities of this committee brought to the offices of the food commission all shippers of produce from Porto Rico seeking relief in a situation of great scarcity of tonnage. Although the matter was foreign to the food commission, the fact that its chairman had a voice in the distribution of tonnage brought a class of people directly in contact with its general work.

The general plan was to move the sugar crop in 10 months from February 1, 1918, and required storage and other arrangements by planters. In addition to sugar, other produce, such as fruit, tobacco, ore, coconuts, etc., must be provided for, and for a time much difficulty was experienced in the proper distribution of the available tonnage. The details of this work would take up too much space, and it is thought that the plan outlined for the coming year will correct the deficiencies, which have been discovered in the method used this year.

The shipments of sugar handled through the Porto Rican producers committee to June 30, 1918, were 281,144 bags of 312 pounds shipped prior to January 31, and 1,513,945 bags from February 1 to June 30, 1918. Up to July 16, when a revision of the figures was made, 193,276 bags of 312 pounds had been sold for local use, and as the total crop amounts to 2,966,791 bags there remained for local use and for shipment a total of 978,426 bags.

Fruit shipments were handled at first through a committee appointed by the chairman of the Porto Rican producers committee, from nominees of a mass meeting of fruit growers, and composed of Mr. W. H. Hill, Capt. E. B. Lesesne, and Mr. S. A. Davidson. There was much dissatisfaction with the distribution made, but thorough investigation proved that this committee had acted in perfect good faith and absolute impartiality, and that the principal cause of complaint arose from an unprecedented demand for so-called wild fruit, while allotments were being made, based on the shipments of each port for the preceding year. There was a disposition to cut down the excess shipments of wild fruit, as the rot was very high, and tonnage was taken up by this inferior fruit that, on its arrival in New York, had to be reloaded and dumped at sea.

The railroad situation in the north and the loss through frost in Florida, together with a preference for oranges over grapefruit during the sugar scarcity, caused the big demand for oranges.

It was found later that applications for space were being padded and that even some applications were being made by shippers having no fruit to ship, and any allotments made to such parties were then sold to others really needing the space. With regular growers it was easy to trace any irregularity, and in justice it may be said that there was little if any disposition among such to any trickery, but with dealers who had come down specially attracted by the peculiar orange situation, and

those buying their fruit throughout the country and then selling to packers at the ports, it was very difficult to properly deal with them, until the Federal food administrator began to classify the fruit shippers into growers who needed no license and dealers subject to license.

Toward the latter part of the season, the distribution of tonnage for fruit shipments was made by a space committee, and on the allotments made by this committee, a local committee for each port dealt with the local distribution.

Although all the gentlemen who served on these committees did good work, it will be recognized by all that the personal work of Capt. Leeseue deserves special mention. Mr. Hill, who happened to be in New York and Washington at a particularly fortunate moment, also rendered good service to the fruit growers when they most needed assistance.

As a matter of statistics, the movement of fruit for the season is given at the end of this report. (See Tables VIII and IX.)

#### POULTRY AND EGGS.

Efforts are being made to increase the production of eggs and improve the stock of poultry on the island. Several plans were discussed, and finally an arrangement has been made with the college of agriculture of the University of Porto Rico, whereby the food commission is advancing funds for the purchase of selected stock which will be cared for at the expense of the college, and the cost of the poultry will be refunded from the sale of settings of eggs.

An attempt will thus be made to distribute the eggs from this poultry throughout the island for the purpose of gradually improving the stock, and increasing the available poultry for egg production.

Further efforts will be made to increase the sources of distribution, as soon as arrangements can be concluded with reliable institutions of a similar character.

#### NITRATE OF SODA.

Through the efforts of the food commission, steps were taken in Washington which placed Porto Rican farmers on a par with the continental farmers in obtaining a supply of this fertilizer ingredient at cost, through the National Government.

That this advantage has not been made use of by our farmers may be due to a lack of knowledge as to the steps to be taken to secure their supply or possibly to later restrictions in the use of nitrates by government orders, and the commission begs to refer any one interested in obtaining a supply to the Department of Agriculture and Labor of Porto Rico for further particulars.

#### COOPERATION.

In emergency measures such as the control of food, success must be dependent on public cooperation and on sympathetic response by a vast majority of those who must make sacrifices to the end in view.

It is, therefore, to such that any credit is due and the food commission here wishes to express its heartfelt appreciation of the wonderful spirit shown by all classes in furthering its work. This spirit has been most marked in the poorer classes, where sacrifice was really pitiful, as their problem was rather to increase their diet, than to make changes which might mean its reduction, by substituting the meager ration to which they were accustomed, by other articles of food.

When the food commission began its work, with no precedents to guide it, and with everything to learn, there was a tendency on the part of the public to expect too much from its labors. On the one hand, a portion of the public blamed it for going too slow, while others were afraid its actions would be too radical, and that business would soon be paralyzed.

At that time Porto Rico was undergoing changes which in other countries take years, and which circumstances forced on this people within a few months and in many cases just a few days. American citizenship, so unexplainably delayed, had been granted and this was followed by a general election, which decided in favor of total prohibition, by the draft, and by the reorganization of its political structure. The war had brought prosperity, and as yet none of the sacrifices which follow in the wake of a state of war, had been experienced. Under these circumstances the food commission was called to act and for the first few months the measures adopted led usually to adverse criticism throughout the island, which feeling gradually changed to an attitude of cooperation, as it was realized that its measures were intended for the improvement of general conditions.



The pledge-card campaign of the United States Food Administration was the first real appeal to the public to join in doing something individually to win the war, and by an intense period of active propaganda, extending the matters which had already been undertaken by the food commission, the whole island was aroused, and the enthusiasm displayed was not confined to any particular section or class.

The United States Food Administration had organized committees in each town under the chairmanship of the alcaldes, and the other members of these committees were nominated by the alcalde, subject to the following requirements: The vice chairman must be a man generally respected and of the highest standing in the town, and the other members must comprise at least two women, one labor leader of standing, one merchant or manufacturer, one farmer or cattle raiser, a municipal doctor, and the school supervisor or a school principal.

The nominees proved to have been selected very carefully and fairly, so that the credit for the organization should be given to the mayors.

The work of these committees was placed under the direction of an executive committee, of which Mr. J. W. Blanco was elected chairman and, after proper preparations, the local committees were met at centrally located towns by special committees sent out by the executive committee, which gave final instructions on the work. At these meetings volunteer speakers aroused enthusiasm by patriotic addresses.

An especial appeal was made to women, and a tremendous response was at once apparent. The earnest and enthusiastic help of our women culminated in a grand public parade on Washington's Birthday in San Juan, in which about 150 women from several towns marched, wearing the housewives' uniform of the Food Administration.

The parade was made up entirely for the propaganda of the patriotic principles involved in food conservation and production, and it was estimated that there were about 6,000 people in line.

To mention some of the ladies to whose personal effort the success of the pledge-card campaign was so successful, would make up a list too long, since it covers the whole island, but as the women did such a large share of this work, and as it is estimated that in the direct work of propaganda there were engaged nearly 10,000 persons, it will be understood that the mention of even a hundred names would be invidious.

The same may be applied to the speakers, as among them were included every brilliant speaker on the island.

The result of this campaign was the pledging of over 137,000 families throughout the island to work along the lines set forth by the National Administration, and since that time a complete understanding has existed between the public and the food commission.

#### THE PRESS.

A potent factor in the success of this movement was the press, and it is fair to say that, without the valuable cooperation of the newspapers, it would have been impossible to carry out the campaign successfully. An attitude of indifference was changed to one of hearty cooperation and of constructive criticism, which was highly appreciated by the food commission, and greatly assisted it in its work.

#### THE INSULAR POLICE.

The great assistance rendered by the insular police has been repeatedly recognized by the commission, and these services have been given so cheerfully and in such diverse ways, that the commission wishes once more to acknowledge its indebtedness.

#### THE COURTS OF JUSTICE.

The insular courts have also been of assistance in the sympathetic enforcement of the resolutions of the food commission, and a report on the cases dealt with is given in the section on regulation.

#### THE TRADE.

The merchants, as a whole, have assisted in the work, although at times there has been a feeling of uneasiness and uncertainty manifest. The attitude outlined elsewhere in this report, at the time the food commission was organized, gradually wore off, and although many have quite realized the need of measures of an emergency nature and are doing their best to cooperate there are others who seem to show a feeling of resentment at being interfered with. As only foodstuffs are being controlled, there is a feeling that those engaged in other lines are having things their own way, while dealers in foodstuffs are being regulated.

The year preceeding the establishment of the food commission was one of unusually large profits in practically every line of business, and it is usually hard to have to change methods of such long standing and substitute a routine plan of dealing where the elements of speculation are not permitted. It had been a practice of many years to purchase rice at the beginning of the season and sell at a large advance when the crop had been marketed, and although it has been proved that, with the exception of the spring of 1917, when large profits were realized, the usual profits averaged very low, yet it has been quite difficult for many merchants to realize that, all being subject to the same rules as to purchasing supplies for only 60 days, and consequently free from a speculation that was purely competitive, the actual results for a year would work out on a safer basis. A continual pretense has been made that the Food Administration rules were intended for the continental United States, and could not be applied here, yet results have proved that the rules were generally applicable and, that in such cases where their application was inadvisable, the Federal Food Administrator's recommendation for a special ruling was accepted in Washington.

The food commission hopes that after the readjustment to present conditions has been completed, the cooperation of the merchants will be more real and effective. It has been waiting for this change to solicit a more active participation of the merchants, not only in an advisory capacity, but for compelling those that hold aloof to assist in the work actively.

The system of credits is really at the bottom of all the trouble with the merchants. There are too many firms engaged in business, and this fact not only makes the cost of distribution higher, but limits profits to such an extent that the returns are unsatisfactory. Despite all the efforts of the food commission to sell direct to retailers, it has been found that there are very few who can pay cash, and they prefer to buy from the wholesalers on credit at a price which is usually too high to permit of a reasonable profit, while the wholesalers are obliged to charge a higher price to cover losses through failures among a large percentage of the small retailers.

Through the requirement of the Food Administration that licensees must render monthly reports, many have begun to take an active interest in the returns from their business, through detail that was unknown prior to this accounting, and they can now trace their profits, and above all, their losses, by articles, where formerly only a fair average at the end of the year was satisfactory. There was no way of tracing pilferage or losses through omitting charges. It is to be hoped that a better knowledge of the minor details of their business and the limitation of profits under the Federal law will drive wholesalers to a complete reorganization of the system of doing business, so that quicker cash will be available on their sales of foodstuffs. The wholesalers have gradually been required by the changed conditions of trade throughout the world to become more and more cash purchasers, and there is no reason why they should continue selling on an absurd credit basis to the retail trade.

The retail trade has been restricted to too small profits on certain staples, based on the high prices they must pay for goods bought on credit, and on sales too small in volume to stand overhead expenses. It must not be thought that the overhead expenses are high in volume, as it is a fact that the cost of operation in Porto Rico is exceedingly low, yet in relation to sales these expenses absorb a larger part of what should be clear profits. Fewer retail stores with more working capital, cash purchasing and modern methods of accounting would be a boon, not only to the trade in general, but to the public as well.

These remarks should be construed as intended in a spirit of constructive criticism, since their purpose is only intended to bring out an actual state of things well known to the trade, but which should be corrected. It would seem that the present emergency circumstances are most appropriate to force business into business methods by establishing a system of cash sales or sales against negotiable paper.

#### THE LABOR ORGANIZATIONS.

Labor organizations have been most appreciative of the work of the food commission, and the propaganda bulletins have reached a large number through the courtesy of the readers in the tobacco factories. President Gompers, of the American Federation of Labor, indorsed this work, and it is estimated that 15,000 persons were reached through this means.

Unorganized labor has also shown its sympathy for the work in many ways, especially by personal suggestions and comments to the commissioners.

## RELIGIOUS ORGANIZATIONS.

The churches took up the propaganda as had never been the case with any matter not directly connected with the faith, and the effect of their efforts was most apparent and very highly appreciated.

The same may be said of the spiritualistic societies and the societies of Christian Endeavor.

The Right Rev. William A. Jones, Bishop of Porto Rico (R. O.), at the request of the Federal Food Administrator, took an active and most helpful part in the propaganda for food conservation and production.

During the food pledge-card campaign a pastoral was issued, and later a circular, which was also signed by the Federal Food Administrator, was sent to all the Roman Catholic parish priests.

The Right Rev. Charles B. Colmore (P. E.), Bishop of Porto Rico, preached several sermons on food conservation work and his eloquent appeal reached a wide circle.

Every church on the island and every denomination gave its assistance to the work. A special message from Mr. Hoover was read in all the churches.

## THE MASONIC ORGANIZATIONS.

The Masonic bodies gave assistance, and greatly encouraged the work of saving food and of increasing its production.

Many resolutions were adopted by the several lodges, in which cooperation was pledged, and this attitude was reflected throughout the community.

## THE DEPARTMENT OF EDUCATION AND PUBLIC SCHOOLS.

The cooperation given by the department of education has been referred to elsewhere, but it was of such importance, and reached such a large proportion of the population most susceptible to such propaganda, that it must be made permanent while the food commission and United States Food Administration exist.

For this cordial relationship not only Dr. Paul G. Miller and his able assistants are to be thanked, but the food commission desires to make its appreciation extensive to every teacher and every school child on the island.

Our women had a chance to show their sympathy with public-spirited movements, and responded as only a few ever thought likely. In every walk of life was found a realization of the need of sacrifice, and the work was taken up with the greatest enthusiasm.

## THE GOVERNOR.

The food commission wishes to thank Gov. Yager for his decided and cordial assistance. The governor has backed every move of the food commission, and has been consulted as to all matters of importance. He has been in close touch with the work, and his advice and cooperation have been invaluable. Through his good efforts were assured the assistance of the bureau of insular affairs and of the Resident Commissioner at Washington in matters of importance, some of which have been mentioned elsewhere in this report.

## BUREAU OF INSULAR AFFAIRS.

To the able assistance of Brig. Gen. Frank McIntyre reference has been made, and to the cooperation of Col. (now Brig. Gen.) Walcutt the food commission is equally indebted.

## RESIDENT COMMISSIONER FOR PORTO RICO AT WASHINGTON.

Judge Félix Córdova Dávila has ably cooperated with the commission in many matters.

The food commission has always found him ready to help and well equipped to carry his efforts to a successful end where the difficulties were not practically unsurmountable.

## AUDITOR OF PORTO RICO.

Full acknowledgment is due, and has been made elsewhere in this report, to the assistance received from the auditor in establishing a practical, simple, and effective system of accounting, while allowing "red tape" to be cut where it was unessential.

## COLLECTOR OF CUSTOMS.

Mention has been made elsewhere in this report of the assistance and support given by the collector of customs to many measures of the food commission, and his cooperation has been so effective that the commission here wishes to express to him its thanks.

## BANKS IN PORTO RICO.

In mentioning the methods of financing its activities, this report contains particulars as to the credit arrangement made with the local banks, and it is with pride that the commission recognizes the assistance given by them in patriotically giving it facilities that have enabled it to carry on its work under such favorable terms.

## TREASURER OF PORTO RICO.

For meeting the views of the commission in the matter of finances, and assisting it in carrying out its plans for securing funds on the most advantageous terms, the commission is indebted to the treasurer of Porto Rico, who has greatly facilitated its work in this manner.

## THE EX-PRESIDENT OF THE FOOD COMMISSION.

Finally, although losing the valuable advice of Mr. Antonio R. Barceló as a member of the commission and its first president, it should be stated that he has always continued in sympathy with the work of the food commission, and has rendered it most decided cooperation in the press and in the legislature.

## ACTUAL RESULTS.

A recapitulation of the actual results obtained by the food commission during the first year of its existence may be summed up as follows:

The fostering of a spirit of conservation of foodstuffs in line with the work done on the mainland.

The material increase in the production of foodstuffs throughout the island, not only tending to economic independence and increased local wealth, but also to a saving of tonnage.

Contributing to a saving in wheat flour for use by the allies which may be measured as follows: 1,400,000 pounds of bread and biscuits and about 50,000 barrels of flour.

An illustration of the way flour has been saved may be had from the fact that from January to March the reports of 190 users showed a total consumption of 49,964 bags of flour, while in the following three months 266 users reported 42,536 bags of flour used, a saving of 7,428 bags of flour, notwithstanding that a greater number of reports were considered in the latter period.

A saving in the retail price of bread, milk, rice, beans, corn and cornmeal, sugar, and perhaps other articles, which may well run over \$2,000,000.

A saving of over 100 head of cattle per week through the "meatless day."

And all has been accomplished not only without a cent of cost to the people of Porto Rico, but at a profit up to this date of half a million dollars.

Respectfully submitted.

ALBERT E. LEE,  
*President.*  
JOHN M. TURNER,  
*Vice-President and Treasurer.*  
E. M. VASSALLO,  
*Secretary.*  
LUIS SANCHEZ MORALES,  
*Member.*  
MANUEL CAMUÑAS,  
*Member.*  
N. A. WALCOTT,  
*Member.*

OFFICE OF THE AUDITOR OF PORTO RICO,  
San Juan, P. R., May 29, 1918.

The honorable the FOOD COMMISSION,  
San Juan, Porto Rico.

(Through the Auditor of Porto Rico.)

GENTLEMEN: In accordance with the verbal request of your vice president and treasurer, and in compliance with my duties as accountant of the commission, I have made an examination of the accounting records and financial operations of the commission, for the period from May 17, 1917, to April 30, 1918, and have the honor to submit my report thereon, comprising three pages of comments and the following exhibits and schedules:

*Exhibit I.*—Cash reconciliation statement as of April 30, 1918.

Schedule A: Statement of cash on hand in the American Colonial Bank, as of April 30, 1918.

Schedule B: Statement of cash on hand in Banco Comercial de Puerto Rico, as of April 30, 1918.

Schedule B-1: List of outstanding checks in Banco Comercial de Puerto Rico, as of April 30, 1918.

Schedule C: Statement of cash on hand in Banco Territorial y Agrícola de Puerto Rico, as of April 30, 1918.

Schedule D: Statement of cash on hand in the Royal Bank of Canada, as of April 30, 1918.

Schedule E: Statement of cash on hand in the National City Bank, New York, as of April 30, 1918.

Schedule F: Statement of cash on hand in the Wells Fargo National Bank, San Francisco, Cal., as of April 30, 1918.

*Exhibit II.*—Trial balance, as of April 30, 1918.

*Exhibit III.*—Statement showing result of operation for the year ending April 30, 1918.

*Exhibit IV.*—Balance sheet at the close of business, April 30, 1918.

Schedule A: Statement of amounts advanced to municipalities as agents of the commission for the purpose of purchasing seeds to be sold to the farmers at cost, as on April 30, 1918.

Schedule B: Inventories, as of April 30, 1918.

*Exhibit V.*—Trial balance, as of May 1, 1918.

Respectfully,

J. A. E. RODRÍGUEZ,  
Chief Division of Audits.

#### COMMENTS ON AUDIT.

The result of this audit will be commented in detail under the general heading appearing below.

#### WORK DONE.

This audit covers the period from May 17, 1917, to April 30, 1918, which latter date is considered as the closing date of the year's business.

The duplicate receipts issued by the treasurer were checked into the cashbook and found to agree in every case.

The vouchers, some 1,700 of them, paid by the treasurer, were likewise checked into the cashbook and found correct with the single exception of one voucher which was missing, but duplicates of originals thereof were obtained to the entire satisfaction of the examiner.

All the entries for the period were analyzed and a check made of all the accounts in the general ledger.

#### EXHIBIT I.

This exhibit shows the cash available as of April 30, 1918, to be \$759,529.79, distributed among the depositaries shown thereon.

All the passbooks of the banks in San Juan were balanced and the net balance brought up to date as per the outstanding checks shown in the various schedules attached to this exhibit.

The balances shown in the various banks in the States were checked by means of the last statement sent down.

To the balance shown herein should be added \$50 kept by the bookkeeper as petty cash, \$600.92 in the hands of Special Disbursing Officer P. C. Adams, and \$2,015.69 in the hands of Gen. McIntyre in Washington.

#### EXHIBIT II.

This exhibit shows a trial balance as of April 30 of the accounts kept by the commission before the adjusting entries for the closing of the books were made.

#### EXHIBIT III.

This exhibit shows the operating account and the loss and gain account as affected by the closing entries. In the former we see that the commission during the year under review transacted over one and a half million dollars worth of business, a fact which in itself speaks for the work which must have been done by all connected with the activities of the commission.

This account also shows the operating cost during the year to have been \$1,075,538.01 as the cost of goods sold, and \$114,723.69 as operating expenses, giving us a net gain as the result of this account of \$489,931.62.

Among the items listed as expenses are noted the following which call for special comments:

*Custom duties.*—This account represents the duty paid by the commission on rice imported from the far East. This item could have been charged to the cost of goods sold "Stock;" but it has been thought advisable to place it here for the following reasons: As soon as this item should be charged to any other account, the importance thereof is lost sight of. While the amount shown, \$34,850.36, appears as an expense of the commission, it should be considered as a net gain for the people of Porto Rico, of which the commission is a part, as the amount paid went directly into the cash account of the government.

*Expenses, market division.*—This account represents the cost of operating the farm which the commission has leased in Aibonito since the month of March, 1918.

*Expense, subcommittee of agriculture.*—This account represents the expense in carrying on the propaganda for agricultural development. Herein are included the salaries of some 35 traveling men for the purpose of giving instruction to the agriculturists all over the island as to the crops most needed and the best way to raise them.

The loss and gain account after all the adjusting entries have been made shows a net gain for the period of \$492,983.67, which has been carried to the capital account of the commission.

#### EXHIBIT IV.

This exhibit shows the actual mercantile condition of the commission as of April 30, 1918. The assets show a total of \$943,246.68, with known liabilities of only \$450,263.01, leaving a surplus of \$492,983.67, which has been carried to the capital account of the commission.

#### EXHIBIT V.

This exhibit shows a trial balance of the general ledger as of May 1st after all the accounts for the year had been properly balanced.

#### GENERAL.

Before closing this report I wish to express my satisfaction of the progress made by the commission and the manner in which all its activities have been carried out.

I have no criticism to make, as what few errors and discrepancies have been noted were corrected at once by the bookkeeper, Mr. Monclova, and it is to his credit that his books have been found in the very best of condition.

The benefits accruing to the island as a result of the activities of the commission should not be measured alone by the half million dollars (\$492,983.67) profits made by the commission during the year, because when we take into consideration the fact that living expenses are less in Porto Rico than in the other neighboring islands we must give credit to the commission for at least a part of such benefit which if measured in dollars and cents would amount to no less than another half a million dollars.

## EXHIBIT I.

*Cash reconciliation statement as of Apr. 30, 1918.*

Cash balance as per cashbook on Apr. 30, 1918.....		\$759,529.79
Cash available in the American Colonial Bank as per Schedule A.....	\$105,208.63	
Cash available in Banco Comercial de Puerto Rico as per Schedule B.....	13,685.99	
Cash available in Banco Territorial y Agrícola de Puerto Rico as per Schedule C.....	18,769.30	
Cash available in the Royal Bank of Canada as per Schedule D.....	38,815.22	
Cash in the National City Bank of New York as per Schedule E.....	254,308.68	
Cash in Wells Fargo Nevada National Bank, San Francisco, Cal., as per Schedule F.....	309,277.01	
Cash in transit to the Royal Bank of Canada on Apr. 30, 1918.....	19,465.06	
<b>Total.....</b>	<b>759,529.79</b>	<b>759,529.79</b>

*SCHEDULE A.—Statement of cash on hand in the American Colonial Bank.*

Cash balance in the American Colonial Bank, as per statement dated Apr. 30, 1918.....	\$105,208.63
Less outstanding checks:	
Check No.—	
339.....	\$12.27
342.....	12.32
407.....	108.06
	<u>191.25</u>
Balance available on Apr. 30, 1918.....	105,208.63

*SCHEDULE B.—Statement of cash on hand in Banco Comercial de Puerto Rico.*

Cash balance in Banco Comercial de Puerto Rico as per passbook balanced Apr. 29, 1918.....	\$23,088.65
Less outstanding checks as per attached list, Schedule B-1.....	10,012.66
Balance available on Apr. 30, 1918.....	<u>13,685.99</u>

*SCHEDULE B-1.—List of outstanding checks in Banco Comercial de Puerto Rico as of Apr. 30, 1918.*

Check No.	Date.	Amount.	Check No.	Date.	Amount.	Check No.	Date.	Amount.
	1917.			1918.			1918.	
279439.....	Nov. 28	\$60.00	17101.....	Apr. 24	\$2.00	17149.....	Apr. 30	\$60.00
	1918.		17104.....	Apr. 24	105.10	17150.....	Apr. 30	60.00
204304.....	Mar. 15	21.85	17105.....	Apr. 24	8.00	17151.....	Apr. 30	60.00
204308.....	Mar. 15	500.00	17108.....	Apr. 24	1.24	17152.....	Apr. 30	60.00
204408.....	Mar. 28	6.25	17110.....	Apr. 24	25.98	17153.....	Apr. 30	60.00
8935.....	Apr. 3	8.00	17111.....	Apr. 24	47.98	17154.....	Apr. 30	60.00
8956.....	Apr. 4	10.00	17112.....	Apr. 25	134.00	17155.....	Apr. 30	60.00
8984.....	Apr. 4	27.50	17113.....	Apr. 25	29.92	17156.....	Apr. 30	60.00
8973.....	Apr. 4	30.56	17114.....	Apr. 25	9.00	17157.....	Apr. 30	60.00
8989.....	Apr. 6	7.00	17115.....	Apr. 25	7.00	17158.....	Apr. 30	60.00
9018.....	Apr. 11	33.00	17116.....	Apr. 25	83.46	17159.....	Apr. 30	60.00
9023.....	Apr. 11	37.15	17117.....	Apr. 25	26.26	17160.....	Apr. 30	60.00
9063.....	Apr. 13	5.00	17118.....	Apr. 25	2.50	17161.....	Apr. 30	60.00
9078.....	Apr. 16	11.84	17119.....	Apr. 26	16.36	17162.....	Apr. 30	60.00
9079.....	Apr. 16	2.42	17120.....	Apr. 26	14.00	17163.....	Apr. 30	60.00
9081.....	Apr. 16	8.00	17121.....	Apr. 26	2.50	17164.....	Apr. 30	60.00
9088.....	Apr. 17	82.50	17122.....	Apr. 26	18.24	17165.....	Apr. 30	60.00
9093.....	Apr. 18	22.12	17124.....	Apr. 26	42.00	17166.....	Apr. 30	60.00
9095.....	Apr. 18	23.00	17125.....	Apr. 26	10.00	17167.....	Apr. 30	60.00
9099.....	Apr. 18	17.50	17129.....	Apr. 26	111.75	17168.....	Apr. 30	60.00
9100.....	Apr. 18	22.50	17131.....	Apr. 30	250.00	17169.....	Apr. 30	60.00
9106.....	Apr. 18	25.50	17132.....	Apr. 30	225.00	17170.....	Apr. 30	60.00
9106.....	Apr. 18	26.00	17133.....	Apr. 30	150.00	17171.....	Apr. 30	60.00
9108.....	Apr. 18	23.50	17134.....	Apr. 30	115.00	17172.....	Apr. 30	60.00
9113.....	Apr. 18	15.50	17135.....	Apr. 30	100.00	17173.....	Apr. 29	1.90
9117.....	Apr. 19	20.75	17136.....	Apr. 30	100.00	17175.....	Apr. 29	.79
9119.....	Apr. 19	22.83	17137.....	Apr. 30	60.00	17176.....	Apr. 29	88.85
9120.....	Apr. 19	23.50	17138.....	Apr. 30	60.00	17177.....	Apr. 29	15.00
9132.....	Apr. 20	17.00	17139.....	Apr. 30	40.00	17178.....	Apr. 29	40.64
9135.....	Apr. 20	20.00	17140.....	Apr. 30	60.00	17179.....	Apr. 29	2.80
9136.....	Apr. 20	40.50	17141.....	Apr. 30	45.00	17180.....	Apr. 29	2.68
9137.....	Apr. 20	50.00	17142.....	Apr. 30	50.00	17181.....	Apr. 29	63.55
17096.....	Apr. 23	.75	17143.....	Apr. 30	166.66	17182.....	Apr. 29	12.38
17097.....	Apr. 23	32.25	17144.....	Apr. 30	100.00	17183.....	Apr. 29	182.15
17098.....	Apr. 24	14.50	17145.....	Apr. 30	100.00	17184.....	Apr. 29	30.38
17100.....	Apr. 24	14.25	17146.....	Apr. 30	100.00	17185.....	Apr. 29	10.48
			17147.....	Apr. 30	60.00	17186.....	Apr. 29	725.00
			17148.....	Apr. 30	60.00	17187.....	Apr. 30	10.00

**SCHEDULE B-1.—List of outstanding checks in Banco Comercial de Puerto Rico as of Apr. 30, 1918—Continued.**

Check No.	Date.	Amount.	Check No.	Date.	Amount.	Check No.	Date.	Amount.
1918.			1918.			1918.		
17188.....	Apr. 30	\$26.00	17217.....	Apr. 30	\$25.00	17398.....	Apr. 30	\$17.00
17189.....	Apr. 30	4.30	17218.....	Apr. 30	22.75	17399.....	Apr. 30	23.50
17190.....	Apr. 30	10.00	17220.....	Apr. 30	17.00	17400.....	Apr. 30	19.88
17191.....	Apr. 30	6.22	17222.....	Apr. 30	27.59	17401.....	Apr. 30	21.75
17192.....	Apr. 30	153.27	17223.....	Apr. 30	22.50	17402.....	Apr. 30	36.55
17193.....	Apr. 30	2.92	17224.....	Apr. 30	6.25	17403.....	Apr. 30	.50
17194.....	Apr. 30	363.56	17225.....	Apr. 30	24.42	17404.....	Apr. 30	123.19
17195.....	Apr. 30	31.75	17226.....	Apr. 30	15.48	17405.....	Apr. 30	135.87
17196.....	Apr. 30	211.27	17228.....	Apr. 30	17.70	17406.....	Apr. 30	114.75
17197.....	Apr. 30	4.56	17229.....	Apr. 30	54.25	17407.....	Apr. 30	20.40
17198.....	Apr. 30	46.94	17230.....	Apr. 30	20.50	17408.....	Apr. 30	14.20
17199.....	Apr. 30	6.07	17231.....	Apr. 30	15.01	17409.....	Apr. 30	5.00
17200.....	Apr. 30	25.74	17232.....	Apr. 30	15.50	17410.....	Apr. 30	217.35
17201.....	Apr. 30	17.50	17233.....	Apr. 30	16.50	17411.....	Apr. 30	5.00
17202.....	Apr. 30	3.00	17234.....	Apr. 30	22.00	17412.....	Apr. 30	30.45
17203.....	Apr. 30	195.00	17235.....	Apr. 30	16.50	17413.....	Apr. 30	5.00
17204.....	Apr. 30	106.75	17236.....	Apr. 30	19.75	17414.....	Apr. 30	2.15
17205.....	Apr. 30	7.00	17237.....	Apr. 30	15.52	17415.....	Apr. 30	58.78
17206.....	Apr. 30	15.75	17238.....	Apr. 30	21.00	17416.....	Apr. 30	18.35
17207.....	Apr. 30	32.75	17239.....	Apr. 30	21.25	17417.....	Apr. 30	80.00
17208.....	Apr. 30	7.35	17240.....	Apr. 30	24.80	17418.....	Apr. 30	47.30
17209.....	Apr. 30	3.59	17241.....	Apr. 30	24.72	17419.....	Apr. 30	16.00
17210.....	Apr. 30	28.80	17242.....	Apr. 30	73.75	17420.....	Apr. 30	9.36
17212.....	Apr. 30	30.00	17243.....	Apr. 30	24.50	17422.....	Apr. 30	170.62
17214.....	Apr. 30	150.00	17245.....	Apr. 30	67.75	17423.....	Apr. 30	153.24
17215.....	Apr. 30	33.00	17396.....	Apr. 30	22.50			
17216.....	Apr. 30	12.25	17397.....	Apr. 30	13.75	Total.....		10,012.66

**SCHEDULE C.—Statement of cash on hand in Banco Territorial y Agrícola de Puerto Rico.**

Cash balance in Banco Territorial y Agrícola de Puerto Rico, as per pass book balanced Apr. 30, 1918.....	\$19,664.92
Less outstanding checks:	
Check No.—	
245730.....	\$225.00
245783.....	60.00
245788.....	60.00
245779.....	102.24
245780.....	27.00
245781.....	31.00
245782.....	34.50
245783.....	16.13
245786.....	60.25
245788.....	269.50
	885.63
Balance available on Apr. 30, 1918.....	18,769.30

**SCHEDULE D.—Statement of cash on hand in the Royal Bank of Canada.**

Cash balance in the Royal Bank of Canada, as per pass book balanced Apr. 30, 1918.....	\$38,875.23
Less outstanding checks:	
Check No. 283010.....	60.00
Balance available on Apr. 30, 1918.....	38,815.23

**SCHEDULE E.—Statement of cash on hand in the National City Bank, New York.**

Cash balance in the National City Bank of New York, as per statement dated Mar. 30, 1918...	\$106,993.58
Indorsement of draft No. 5647 on the Royal Bank of Canada.....	100,000.00
Indorsement of drafts No. 3, No. 2, No. 1 on Armour & Co.....	7,315.00
Indorsement of draft on Kountze Bros., of New York.....	100,000.00
Indorsement of draft on the National City Bank of New York.....	100,000.00
Indorsement of draft on Muller Schall & Co., of New York.....	100,000.00
Total in bank and in transit.....	514,308.58
Less outstanding drafts:	
Draft No. 5 and cable order in favor of Wells Fargo National Bank, dated Apr. 23, 1918.....	\$200,000
Draft No. 6 in favor of Wells Fargo National Bank dated Apr. 23, 1918.....	60,000
	260,000.00
Balance available on Apr. 30, 1918.....	254,308.58



**SCHEDULE F.—Statement of cash on hand in the Wells Fargo National Bank, San Francisco, Cal.**

Cash balance in the Wells Fargo Nevada National Bank, San Francisco, Cal., as per statement dated Apr. 30, 1918.....	\$240,277.00
Deposit in transit: Draft No. 6 on the National City Bank of New York, dated Apr. 23, 1918.....	80,000.00
Balance available on Apr. 30, 1918.....	300,277.00

**EXHIBIT II.**

*Trial balance as of Apr. 30, 1918.*

Accrued interest payable.....	\$16.12	\$263.04
Freight cartage and express.....	.....	.....
Bills payable.....	.....	450,000.00
Cash.....	789,529.79	.....
Unexpendable property (inventory at cost).....	2,249.15	.....
Expenses.....	4,404.93	.....
Postage, telegraph and telephone.....	3,280.99	.....
Subcommittee of agriculture.....	23,184.65	.....
Salaries.....	17,846.79	.....
Stock (inventory at cost, \$154,920).....	.....	449,735.31
Interest on notes.....	16,085.42	.....
Traveling expenses, wages and per diems.....	4,536.37	.....
Seeds account (inventory at cost, \$578.73).....	1,063.29	.....
Petty cash.....	80.00	.....
Claim account.....	4.24	.....
Bureau of supplies, printing, and transportation.....	3,451.52	.....
Rentals.....	793.23	.....
Director of agriculture, St. Croix.....	3.45	.....
Depreciation of unexpendable property.....	160.23	.....
Reserve for depreciation of unexpendable property.....	.....	160.23
Accrued insurance.....	7,347.34	.....
Advances to municipalities, seeds account.....	13,683.03	.....
Advances to municipalities, meat account.....	500.00	.....
Loss and gain.....	343.19	.....
Interest and discount.....	.....	3,418.49
Exchange.....	.....	465.55
Military government of Santo Domingo.....	334.40	.....
Custom duties.....	34,850.36	.....
P. C. Adams, special disbursing officer.....	600.92	.....
Market division.....	2,217.17	.....
Advance to Federal Food Administrator.....	1,564.73	.....
Frank McIntyre.....	2,015.69	.....
Kansas Milling Co.....	11.90	.....
Tyrell Rice Milling Co.....	7.75	.....
Helm & Co.....	375.80	.....
New York & Porto Rico Steamship Co.....	804.01	.....
Joaquin Diaz, Yauco.....	637.50	.....
Market division, crops and seeds (inventory at cost).....	562.65	.....
Market division, unexpendable property (inventory at cost).....	1,551.61	.....
Reserve for depreciation of unexpendable property, market division.....	.....	15.58
	904,058.11	904,058.11

**EXHIBIT III.**

*Statement showing result of operation for the year ending Apr. 30, 1918.*

**OPERATING ACCOUNT.**

By sales during the year.....	\$1,680,196.33
To cost of goods sold.....	1,075,538.01
Gross profits from sale.....	604,658.31
To expenses as follows:	.....
Salaries.....	\$17,846.79
Postage, telegraph, and telephone.....	3,280.99
Freight, cartage, and express.....	16.12
Traveling expenses, wages, and per diems.....	4,536.37
Rentals.....	793.23
Interest on notes.....	16,085.42
Accrued insurance (paid).....	7,347.34
Custom duties.....	34,850.36
Expenses, market division.....	2,217.17
Expenses, subcommittee of agriculture.....	23,184.65
Depreciation, office furniture and fixtures (1 per cent per month).....	160.23
Miscellaneous expenses.....	4,404.93
Net gain from operation to loss and gain below.....	114,722.69
	480,381.02

## LOSS AND GAIN ACCOUNT.

By net gain from operation.....	\$480,931.62
By interest and discount.....	3,418.49
By exchange.....	465.55
	<hr/> 483,815.66
To claim account.....	\$4.24
To seeds account.....	484.56
To sundries.....	343.19
	<hr/> 831.99
Net profits for the year.....	482,983.67
To food commission, capital account.....	482,983.67

## EXHIBIT IV.

*Balance sheet at the close of business Apr. 30, 1918.*

## ASSETS.

Cash:	
In banks and in transit (see Exhibit I).....	\$759,529.79
In office (petty cash).....	50.00
In hands of P. C. Adams, special disbursement officer.....	600.92
In hands of Gen. Frank McIntyre.....	2,015.69
	<hr/> \$762,196.40
Accounts receivable:	
Bureau of supplies, printing, and transportation.....	3,451.52
Director of agriculture, St. Croix.....	3.45
Advances to municipalities, seeds account.....	13,683.03
Advances to municipalities, meat account.....	500.00
Military government of Santo Domingo.....	334.40
Advances to Federal food administrator.....	1,564.73
Kansas Milling Co.....	11.90
Tyrrell Rice Milling Co.....	7.75
Helm & Co.....	375.60
New York & Porto Rico Steamship Co.....	804.01
Joaquin Diaz, Yauco.....	637.50
	<hr/> 21,373.89
Inventories:	
Stock (see Exhibit IV, Schedule B).....	154,920.00
Seeds account (see Exhibit IV, Schedule B).....	578.73
Office furniture and fixtures.....	\$2,249.15
Less reserve for depreciation.....	160.23
	<hr/> 2,088.92
Market division, implements, tools, etc.....	1,551.61
Less reserve for depreciation.....	15.52
	<hr/> 1,536.09
Market division, crops and seeds.....	552.65
	<hr/> 189,676.39
	<hr/> 943,246.68

## LIABILITIES AND CAPITAL ACCOUNT.

Accrued interest payable.....	263.01
Bills payable.....	480,000.00
Food commission, capital account.....	482,983.67
	<hr/> 943,246.68

**SCHEDULE A.**—*Statement of amounts advanced to municipalities as agents of the commission for the purpose of purchasing seeds to be sold to the farmers at cost, as of Apr. 30, 1918.*

Municipality.	Amount advanced.	Municipality.	Amount advanced.
Adjuntas.....	\$1,823.51	Hatillo.....	\$31.00
Agua Buenas.....	19.50	Juncos.....	15.00
Aibonito.....	546.66	Lares.....	267.26
Añasco.....	290.24	Las Marias.....	241.87
Arecibo.....	256.50	Mayaguez.....	140.00
Arroyo.....	526.23	Moca.....	735.86
Barranquitas.....	72.75	Morovis.....	339.23
Barros.....	254.76	Patillas.....	104.88
Cabo Rojo.....	63.75	Ponce.....	203.50
Caguas.....	14.00	Quebradillas.....	145.17
Camuy.....	392.20	San German.....	99.50
Carolina.....	662.12	San Sebastian.....	2,756.69
Cayey.....	942.63	Santa Isabel.....	9.25
Cidra.....	70.00	Utua.....	1,491.29
Coamo.....	52.00	Vega Baja.....	6.37
Corozal.....	50.05	Villaalba.....	67.50
Guayama.....	68.25	Yauco.....	770.61
Guayanilla.....	10.00		
Gurabo.....	45.50	Total.....	13,683.03

SCHEDULE B.—*Inventories as of Apr. 30, 1918.*

## STOCK INVENTORY.

Bulkhead shed warehouse, San Juan:		
8,207 sacks Saigon rice, at \$17.....	\$139,519.00	
1,990 sacks California (CSC2) rice, at \$7.40.....	14,726.00	
Lumber in stock.....	200.00	
		\$154,445.00
Ponce warehouse: 25 sacks Saigon rice, at \$17.....		425.00
Mayaguez warehouse: Lumber in stock.....		50.00
Total of stock inventory.....		154,920.00

## SEEDS INVENTORY.

Fruit exchange warehouse, San Juan:		
2 bags peanuts, 175 pounds, at 11 cents.....	\$19.25	
2 bags Sudan grass, 210 pounds, at 40 cents.....	84.00	
22.5 bags red beans, 2,250 pounds, at 14 cents.....	315.00	
2.5 bags corn, 250 pounds, at 5.5 cents.....	13.75	
4 bag castor beans, 135 pounds, at 12 cents.....	16.20	
Seeds in transit—		
To G. S. Swanson.....	\$11.00	
To Southern Fruit Co.....	9.00	
To Dr. Martha F. Caul.....	28.68	
		48.68
Coamo warehouse: White beans, 798.5 pounds, at \$10.25 per hundredweight.....		496.88
		81.85
Total of seeds inventory.....		578.73

## EXHIBIT V.

*Trial balance as of May 1, 1918.*

Bills payable.....		\$450,000.00
Cash.....	\$750,539.79	
Petty cash.....	50.00	
Director of agriculture, St. Croix.....	3.45	
Reserve for depreciation of unexpendable property.....		160.23
Advance to municipalities, meat account.....	500.00	
Military government of Santo Domingo.....	334.40	
Accrued interest payable.....		263.01
Bureau of supplies, printing, and transportation.....	3,451.52	
P. C. Adams, special disbursement officer.....	600.92	
Advance to municipalities, seeds account.....	18,683.03	
Unexpendable property.....	2,249.15	
Advance to Federal food administrator.....	1,564.73	
Seeds account.....	578.73	
Stock.....	154,920.00	
Frank McIntyre.....	2,015.00	
Kansas Milling Co.....	11.90	
Tyrrell Rice Milling Co.....	7.75	
Helm & Co.....	375.60	
New York & Porto Rico Steamship Co.....	804.01	
Joaquin Diaz, Yanco.....	637.50	
Market division, crops and seeds.....	552.65	
Market division, unexpendable property.....	1,551.61	
Reserve for depreciation of unexpendable property, market division.....		15.53
Food commission, capital account.....		492,993.67
	943,422.43	943,422.43

TABLE A.—*Liquidation of cost and proceeds of the sale of cargo of rice bought at Saigon and sold in Naples for account of the food commission of Porto Rico.*

Invoice value paid through the Philippine National Bank.....	\$200,306.11
Paid to the Treasurer of the United States for war-risk insurance.....	\$18,750.00
Less refund for incomplete voyage.....	6,250.00
	12,500.00
Paid Peabody, Slosson & Smith for marine insurance on hull and cargo.....	10,500.00
Less refund for incomplete voyage.....	900.00
	9,600.00
Paid to the Philippine Government for expense in connection with purchase and loading of rice.....	9,637.80
Paid to the American consul at Naples expenses in unloading and inspecting cargo.....	484.31
Traveling expenses in connection with purchase of rice to replace the above cargo.....	1,991.29
Total cost.....	234,518.51
Net profit.....	500,656.68
Total amount received from the Italian Government.....	735,175.19

TABLE B.—*Statement of notes subscribed by the governor during the fiscal year 1917-18 and those which have been paid up.*

		Debit.	Credit.
May 17, 1917	One note American Colonial Bank.....		\$50,000
June 11, 1917	Three notes Banco Comercial de Porto Rico.....		150,000
June 2, 1917	Six notes American Colonial Bank.....		300,000
July 11, 1917	Three notes Banco Territorial y Agrícola.....		150,000
Aug. 31, 1917	Payment of one note American Colonial Bank.....	\$50,000	
Sept. 27, 1917	One note Banco Comercial de Porto Rico.....	50,000	
Do.....	One note Banco Territorial y Agrícola.....	50,000	
Nov. 21, 1917	Five notes Royal Bank of Canada.....		250,000
Nov. 27, 1917	Payment of one note Banco Comercial de Porto Rico.....	50,000	
Do.....	Payment of one note Banco Territorial y Agrícola.....	50,000	
Nov. 30, 1917	Payment of two notes American Colonial Bank.....	100,000	
Dec. 26, 1917	Payment of one note Banco Comercial de Porto Rico.....	50,000	
Jan. 2, 1918	Payment of two notes American Colonial Bank (\$35,000 and \$50,000).....	85,000	
Feb. 25, 1918	Payment of one note Banco Territorial y Agrícola.....	50,000	
Mar. 1, 1918	Payment of one note American Colonial Bank.....	50,000	
Mar. 11, 1918	Payment of two notes Royal Bank of Canada.....	100,000	
Apr. 11, 1918	Payment of one note Royal Bank of Canada.....	50,000	
Apr. 23, 1918	Two notes Banco Comercial de Porto Rico.....		100,000
Do.....	Two notes Banco Territorial y Agrícola.....		100,000
Do.....	Two notes American Colonial Bank.....		100,000
Balance.....		450,000	
		1,185,000	1,185,000

Balance unpaid April 30, 1918, \$450,000.

#### REPORT OF THE COMMITTEE ON AGRICULTURE.

##### AGRICULTURAL WORK FROM MAY 9 TO AUGUST 31, 1917.

The first meeting of the committee on agriculture was held May 9, 1917, and a temporary organization was formed. During the next five weeks information relating to food crops was obtained by correspondence and personal visits to nearly all the municipalities on the island, and after that field work was undertaken.

*Staff.*—The first agricultural agent was appointed June 18, and by July 1 the staff consisted of one man paid by the Federal Government, besides Mr. Henricksen and 43 men paid by the commission, together with two clerks. The men were practically all school teachers, and most of them were appointed to work during the vacation in the districts where they lived, at a salary of \$30 per month.

*Scope of work.*—The object of the agricultural work being to increase and to maintain the food supply of the island, the field agents were instructed to devote themselves to that task. The general rules laid down were: Urge production, give instructions, and obtain data.

In the matter of urging, it was found that the great majority of the country people were willing and anxious to do their part in helping to win the war. Some could not see their way clear to plant any more than they had planted, although they had plenty of idle land. Others could not for one reason or another plant anything at all. There were many hundreds of those, but through correspondence and repeated visits of the field agents ways were suggested and means found by which thousands of acres were planted. Although the field agents were by no means expert agriculturists, they, all of them, had a better general knowledge than the average Porto Rican small farmers. For that reason the instruction given at personal visits to individual farmers and in lectures at meetings in the rural districts was of great value to the people.

In the matter of obtaining data we found great opposition on account that the country people were very suspicious of any and all government agents. It was feared that the government had some sinister designs, such as increasing taxation. For that reason, as well as by reason of the immensity of the task itself, the first fairly reliable crop statistics were finished by September 1, as planned. It was found necessary to hire special men to help the regular agents during the last week in August, but even with that help the statistics were not finished until September 15. As shown in Table No. 1, in planting up to September 15, 1917, of the 10 food crops reported upon totalized 137,273 acres.

*Equalizing distribution.*—It was found at the very beginning that the prices on food crops were very much higher in some places than in others, and the agricultural agents were furnished with information on that matter every week. It soon became apparent, however, that this commission had to render direct assistance, especially in supplying

seeds, and the seeds actually handled amounted to 11,212 pounds. This seed, with the exception of a limited amount, was bought on the island in districts where there was not a shortage, the sales price being in all cases merely cost plus transportation.

#### AGRICULTURAL WORK FROM SEPTEMBER 1, 1917, TO APRIL 30, 1918.

The agricultural agents mentioned above were all employees of the department of education, and working for a small salary during the summer vacation. But as the results were so encouraging, it was decided to organize a department of agriculture of the food commission, which organization was perfected and the work continued without interruption.

*Staff.*—In order to avoid the overlapping of work and a waste of money, the new organization was made to include not alone the food commission and the Federal agricultural extension department, but also the educational department, which was at that time the only other department doing agricultural extension work on the island. Twenty-five men were engaged by the food commission and placed in as many different school districts. The department of education had on its teaching staff 10 agricultural teachers in charge of agricultural work in 10 separate school districts, making 35 men in all. In this scheme of cooperation these special teachers of agriculture became partly responsible to the food commission through this department, and the entire staff of rural teachers became collaborators. On the other hand, the 25 men paid by this commission became agricultural teachers, partly responsible to the department of education through the school supervisors of the districts where they were placed.

The Federal agricultural extension department furnished one man, Mr. Henry C. Henriksen, to continue in charge of the work, and another man, Mr. Félix Reina, who became agricultural lecturer. An additional agricultural lecturer was paid by this commission.

#### EXPENDITURES SEPTEMBER 1, 1917, TO APRIL 30, 1918.

<b>Office expenses:</b>		
Salaries.....	\$1,254.62	
Supplies, printing and postage.....	888.63	
		<b>\$2,143.25</b>
<b>Field expenses:</b>		
Salaries.....	12,196.66	
Travelling expenses.....	8,801.99	
		<b>20,998.65</b>
<b>Total.....</b>		<b>23,141.90</b>

*Scope of work.*—With the experience gained during the two months previous to September 1, it was possible to organize the work on a permanent basis from the very beginning. Plans were outlined and mimeographed, report cards in sizes to fit standard filing cases were printed, charts and lectures were prepared, and a meeting was called to be held in the Carnegie Library in San Juan. The meeting continued for three days and was attended by the entire staff. The work, its object, and how to do it, were explained and discussed; lectures were delivered by members of the food commission and by officers of the agricultural department, and every one had a clear idea of the work before leaving the meeting. The following is a detailed statement of different kinds of work, the records of which we have on file:

*Agricultural committees.*—Instructions were given to the agricultural agents to start their work by holding meetings in all rural districts, and asking the people to organize at least one agricultural committee in each barrio. That was done, and a number of committees were organized at once. In some districts it required several months to perfect the organizations, and as a matter of fact some barrios are yet to be organized, whereas in other barrios there may be as many as three committees.

It has not been possible to conduct a direct correspondence with each separate committee, and so far most of the information we have about this part of the work has come through the agricultural agents. As soon as we receive the report card stating that a new committee has been formed in a certain municipality, giving the name of the barrio and the names of the officers, we issue a nicely engraved certificate which is then usually posted in the local schoolhouse, or whichever other meeting place the committee may have.

The work of these organizations has been of inestimable value to this commission. Through them it has been possible to hold interesting and instructive agricultural meetings, to conduct experiment and demonstration work, and to gather statistical data, which it would otherwise have been difficult to get. However, the greatest value of this organization work has been and will be, in the future, along the line of community welfare and cooperative efforts similar to what we find in other countries.

We can not in this report give a detailed statement of the work of the different committees, but we may mention a few examples.

One central committee representing a municipality collected a lot of seed (beans and corn) for free distribution among the poorer planters of the community. In another place a committee of ladies collected money with which to buy garden seeds that were distributed among the children of the municipality. In a great number of cases landowners and those who own no land have met on common ground in committee meeting, and agreed upon ways and means for planting an additional acreage of land.

While this is being written a president of a committee in a rural district reports that on April 27 a meeting was held by this committee, in which it was decided to do away with all gambling in the barrio. Those who know the baneful effect of cockfighting and other kinds of gambling in Porto Rico will realize what it means when the rural population takes such a stand.

In several communities the problem of stealing is being solved by the local committees. We know that in spite of the laws of the island, and without criticizing those who enforce the law, this particular problem is very serious. Not more so than it is in other islands in the West Indies, but in view of the difficulties encountered in some islands, even with laws much more stringent than those of Porto Rico, it is evident that the problem will never be solved until it is solved by the people themselves.

In view of the fact that the organization of agricultural committees is the beginning of agricultural cooperation, there is almost an unlimited scope for future activity. But as it is not the object of this report to outline what has been done, we shall merely mention that the distribution of thousands of dollars' worth of seed on credit through the mayors has been greatly facilitated by the local organizations. Also, in a few cases farm implements have been obtained by farmers and neighbors on the cooperative plan.

*Agricultural meetings.*—The value of agricultural meetings has already been mentioned. So-called parents' meetings have been held during the last few years under the auspices of the department of education, and the meetings held this year have been in line with those, except that agriculture has usually been the chief topic and of course the work in general has been greatly extended.

The success of these meetings has by no means been due entirely to the efforts of the agricultural agents alone. The school supervisors have in many districts been the prime movers, and in practically all districts the school teachers, as well as prominent people of the town, have taken active part. The two traveling lecturers have been moving from place to place constantly, but it has, of course, not been possible to fill all demands, especially as most of the meetings are held on Saturday and Sunday.

To help the agricultural agents and other speakers at the meetings, lectures were prepared in this office, mimeographed, and sent out in large enough quantities to supply the demand. Two of these lectures are attached herewith, to show the scope of the work.

Besides those lectures all the agricultural agents, school supervisors, and a number of rural teachers were furnished with a full set of bulletins from each of the experiment stations in Porto Rico, as well as a set of 60 farmers' bulletins of those best adopted to Porto Rican conditions. The latter were obtained through the courtesy of Judge Félix Córdova Dávila, resident commissioner to Porto Rico in the National Capital.

*Recommendations.*—All of this material has furnished enough topics for the meetings so far, but the time has arrived when the people are not satisfied with being told; they want to see. That is natural. In the States, trains and automobile trucks are fitted up with exhibits of crops, live stock, machinery, charts, pictures, etc., and taken from town to town. That we must do here also, in order to make our extension work more efficient. We have some charts and also a couple of lanterns with a limited number of slides belonging to the Federal Department of Agriculture, but we need the actual material and means to move it. Undoubtedly the railroad company will furnish a car, and a lot of implements can be obtained free from dealers. Improved live stock can be borrowed, and all in all, the cost should not be very great.

*Demonstration plots.*—The farmer as a class, regardless of nationality, is skeptical. He is usually willing to take advice, but he will not act upon it, unless he knows that it is good advice. He can not know except he is shown; for that reason demonstration plays such an important rôle in agricultural extension work. Our demonstration plots have been cultivated by farmers, and this department has, as a rule, done nothing more than give advice through the agricultural agents. For that reason it will readily be understood that the value of the work in a certain locality has been dependent in a large measure upon the capability of the agent.

The work in general has been along the following lines: How to improve worn-out land by growing legumes as a cover crop. How to obtain larger yields by certain preparation of the soil. The difference between good and poor cultivation. The value of manure and compost, and how to make the latter. The right and the wrong way of planting the different crops. The value of seed selection. How to prepare the products for storage and how to store them.

*Experiment plots.*—It was not the intention of this department to conduct scientific experiments, neither has it been possible to do so, but it has been possible to try out a number of different crops in different parts of the island, and the data obtained will serve as a foundation for further investigation.

*Potatoes.*—The Federal experiment station paid for 10 barrels of seed potatoes, which were distributed among the agricultural agents with instructions for planting and cultivating, the object being to find out which are the districts best adapted to potatoes.

The seed used in this experiment was bought from a local merchant. It was out of a lot of potatoes coming from Spain, and although those potatoes were not of a known variety, we took for granted that they would succeed as well or even better than known varieties from the States. That proved to be a mistake, however, for the reports show a uniformly poor yield.

We tried to buy seed potatoes of well-known early varieties in the States, but did not succeed on account of the congestion of traffic during the winter. Those who planted potatoes seem to have used whatever tubers could be obtained in the market. For that reason there is no data on varieties, but it is interesting that the American-grown seed gave uniformly good result.

The data on acreage planted this season are not complete, but it appears to be upward of a thousand acres.

The yields reported are very variable. We have from some districts reports showing an average of 2,000 pounds per acre. From others 4,000 pounds, and we have even reports of 10,000 pounds. It would appear from our data that in good mellow soil, well prepared and well fertilized, satisfactory yield can be obtained.

As to localities, we have data from all over the island, lowland as well as highland, showing that potatoes can be grown during the winter months. The question of best localities, as well as that of the most favorable time for planting, has not been definitely determined. November, December, January, and February seem to be good planting months for all districts, provided the weather is favorable. On the Coastal Plains planting earlier or later seems to be a failure. Whether or not it can be made a success in the mountains during the same months, we do not know.

Further work along this line should be pushed vigorously. It should be ascertained which varieties are most suitable and the best time for planting in the different districts. The indications are that Porto Rico can not alone produce enough potatoes for home consumption, but she can also compete with Cuba in shipping potatoes to the States during the winter months.

*Soya beans.*—Seeds were distributed for trials in all districts and several hundred pounds sold. The results were uniformly good, and it may be stated that the soya bean will grow in Porto Rico and yield as much and usually more than the red or white bean commonly grown.

*Black Venezuelan beans.*—Seeds of that bean were distributed free through the courtesy of Messrs. Lluberas Hermanos, of Guayanilla. The results show a yield considerably larger than that of the red and white beans, but the complaints are that people will not pay as high price for the blacks as for the others. This, however, seems to be due entirely to the color for the quality is very good.

*Pinto beans.*—A hundred pounds of the famous Pinto beans that thrive so well in the arid Southwest in the States were used for experiment purposes. The results are inconclusive, but the trials are being continued.

*Varieties of beans.*—Neither the public in general nor the experiment station workers have realized that there is such a large number of bean types on the island. We have a collection of beans that is extremely interesting, and the data on yields show conclusively that there are some very much more profitable to grow than others. It has been well demonstrated that a good plant breeder, in cooperation with the extension department, would have a fair chance of improving our beans as well as other food crops in a very short time.

*Corn.*—A half ton of selected corn was distributed free through the courtesy of Llinas & Co., of Yauco. This company also supplied most of the corn seed handled by this commission, and they seem to be the only dealers who have so far gone to the trouble of selecting the seed and keeping it in perfect condition for many months.

A ton of white Venezuelan corn, slightly damaged, was given to us for free distribution by Frank S. Soler, of San Juan, and the results indicate that it can be grown successfully here.

Several hundred ears of corn were selected in the Cabo Rojo-Lajas district and distributed for experimental purposes, but we have not yet received the data on the result of that work. It is absolutely certain that systematic selection will produce excellent results in a very short time.

*Onions.*—According to our data, there were 566 acres of onions planted this season, as per the following table:

*Onions harvested during season of 1917-18.*

Municipality.	Acres.	Municipality.	Acres.
Aguadilla.....	18	Manati.....	25
Arecibo.....	12	Quebradillas.....	37
Camuy.....	45	Rio Grande.....	10
Carolina.....	29	San Sebastian.....	4
Dorado.....	3	Toa Baja.....	5
Hatillo.....	99	Vega Baja.....	19
Isabena.....	214		
Lajas.....	5	Total.....	566
Loiza.....	41		

There seems to be no complaints regarding yields, although the figures given are very variable. The varieties grown are the so-called Bermuda. The Mediterranean varieties have been tried and have been found to be not successful. The seeds of the Bermuda onion grown in Porto Rico came from the Canary Islands, but on account of the high price and often poor quality, experiments are now being made with California seed. Also experiments are being made to show whether or not we can produce the seed here.

The only real complaint of the onion growers is that the price is too low when they want to sell their crop. That is due to the fact that they have not yet learned how to cure the bulbs and how to keep them. Neither do the growers cull and sort the bulbs, and usually they ship in bags.

All of those problems we have worked with, and by continuing there is no question but what they can be solved. In fact the problems are solved; it is merely a question of disseminating the knowledge in such manner that the farmers may derive immediate benefit from it.

*Peanuts.*—Seeds have been bought in the States and distributed for experimental purposes. Also some have been sold and the cultivation has been encouraged as much as it has been possible to do so. This crop has been grown for years in some districts, but scarcely at all in other districts. We have no reliable data on yields nor on varieties, although the indication is that the so-called Spanish peanut is the best variety for Porto Rico.

*Sudan grass.*—This is a forage grass of recent introduction in the States. It has been tried here for about two years, and seed was bought to supply the demand of many who wanted to try it. Its value is supposed to be greatest in the drier districts, but the data are not conclusive.

*Castor beans.*—In line with what is being done in the States to encourage the production of castor beans during the war, we imported seed from Santo Domingo, and sent out circulars to planters. About 400 acres have been planted to date and the acreage will be greatly extended as soon as more seed can be obtained.

*Miscellaneous crops.*—There was a general belief a generation since that certain crops could not be grown in Porto Rico and that there was no use in trying to grow them. It has been suggested that the belief was kept up by those who had an interest in supplying these food articles, but whether that is so or not, it is time to find out what can or can not be produced.

The garden pea thrives extremely well in Barros. Garlic is produced in small quantities in the Fajardo-Luquillo district, and also in the Toa Alta and Vega Alta district.

Garbanzas are grown frequently in school gardens, and the quality produced is good. These are but a few of the products now imported from abroad that may possibly be grown here if somebody would take enough interest in the matter.

*Recommendations.*—From the experience gained, we conclude that practical field demonstrations are very much needed, and we strongly recommend the extension of this work. There is a great mass of accumulated knowledge relating to tropical agriculture, but it will take long for the average Porto Rican farmer to avail himself of it if he is to get it from books only.



The cost of field demonstration work should not be very great. The land can usually be obtained free for a number of years through cooperation with the municipality, and products will more than pay for the labor. But there will be the salary of a man who can, however, attend to several plots in neighboring municipalities. Also there will be implements, seeds, fertilizers, and many other items to pay for, but if the manager is practical, which must be, or the work is valueless, the cost will be small compared with what the island will realize in increased production and eventually in increased land value.

*Seed distribution.*—Garden seeds produced in the States can always be obtained in Porto Rico, and the quality is, as a rule, good, for there is some commercial competition. The allotment of Congressional seeds was given to this department for distribution by Judge Córdova Dávila, the Resident Commissioner for Porto Rico in Washington, D. C. Also a thousand packages of seeds were also given by Sucesores de Blancas, of Mayaguez, and distributed free.

Farm seeds can not always be obtained, for no one makes a specialty of handling them. Seeds of rice, beans, and corn are always obtained from merchants who handle those grains for consumption, but of course in such cases selected seeds can not be obtained and the germination is frequently poor. But aside from that, seeds can frequently not be obtained at planting time except at excessively high prices. The reason is that grains are difficult to keep in this climate without specially made storage tanks, and farmers who have no such tanks, and no money with which to buy them, prefer to sell their grains at harvesting time, even though they have to pay much higher prices later.

As stated at the beginning of this report, this commission was called upon to render direct aid, and what has actually been accomplished is of some magnitude considering that the work has been performed as a side issue by the regular staff.

*Seeds handled by the food commission during the year ending Apr. 30, 1918.*

	Pounds.		Pounds.
Red beans.....	33,211	Selected corn.....	16,540
Black beans.....	1,100	Cowpeas.....	6,000
White beans.....	13,018	Peanuts.....	800
Castor beans.....	1,100	Sudan grass.....	500
Soja beans.....	2,400	Yautias.....	6,000
Kafir corn.....	1,000		
White corn.....	2,750	Total.....	84,417
To seeds bought.....			\$7,864.14
By seeds sold.....			6,800.85
By stock on hand Apr. 30.....			578.73
By seeds for experiment and demonstration purposes.....			125.22
Loss by spoiling, shipping, etc.....			359.34
			7,864.14

As shown in the above statement, some seeds were used for demonstration purposes. Some were imported by special demand from planters, but on account of the long time before the shipments reached here, the best planting season was over, and some of the seeds lost germination by being kept in stock too long. All of the seeds bought were sold at purchase price, and as there is always a loss in shipping and handling, the transaction resulted in a loss. However, the service has resulted in thousands of acres of land being planted, because we have been able to supply seeds in many cases at prices 5 to 6 cents lower than the regular market price.

The production of food crops (frutos menores) in Porto Rico is under normal conditions distinctly a small farmer's business, and of course it is equally so under war conditions, although many of the larger planters are helping. The small planters, who usually rent the land they cultivate, are frequently poor, and it has been necessary to render financial aid to enable them to plant. While such aid was often given by the landowners, this commission was usually called upon to supply the seed on credit. This was arranged with the municipal authorities, who became responsible for the money loaned, and who gave out the seeds against contracts, signed by such planters as were recommended by our agricultural agents and the local organizations. The amount of money actually loaned out in that way amounts to \$14,099.34, as detailed in Table 2, column 11, and we have so far had no report of a planter being unable or unwilling to pay back the loan.

*Home gardens.*—The home garden is partly an educational effort. The department of education has been advocating the movement for some time, and it has come almost entirely through the schools. The development has been especially strong this year, because of the work of the agricultural agents, and it is worth mentioning here because the home gardens have supplied a very considerable amount of food. With some

extra effort it will be possible to extend this work, and we believe that it will be profitable to do so. In the city of Ponce the school children have what they call "war gardens." They have about 500 such gardens which are supposed to be in places that were not cultivated until this year.

The data on home gardens given in Table 2, column 6, are of no great statistical value, for the size of such gardens vary from a few square feet to an acre in extent. But it illustrates in some measure the extent of the activity.

*School gardens.*—While the school garden is entirely an educational measure and part of the regular work of the department of education, we mention it because the agricultural agents have helped to make it a success this year. Also it is of considerable importance from the standpoint of food production, as we are aware of many instances where the school garden has at times been practically the only source of a regular supply of vegetables for a town; also frequently school gardens supply plants for home gardens, and in that way help to stimulate production. In connection with that, it is also worth mentioning that the sale of these products is an important matter in itself. We have reports showing that in places the sale of vegetables cover all expenses for seed, tools, and hired labor, and the surplus money, which is in some cases considerable, has been devoted to the purchase of War Saving Stamps. If school gardens can teach the children the value of saving, the work is doubly valuable, and the department of education should be highly complimented.

*Crop statistics.*—As far as we have been able to ascertain, the crop report issued in September, 1917, gives the first statistical data that was ever collected in this island of the crops mentioned. It has, of course, been necessary for this commission to have such a data, and the work has been continued, as shown in table 3. The first couple of months we encountered many difficulties that could not have been overcome so easily if it had not been for the valuable cooperation of the ever-willing rural-school teacher. The backwoods farmer was by no means willing to believe that the Government did not want to take something away from him. But of all public institutions, the school comes closest to the people, and it was possible to get results through the schools, where any other agency would have failed. That particular obstacle has now been removed, and it will in the future be possible to gather statistics through the local committees. But, at best, a crop statistical service here is a different problem compared with what it is in the North. We have here 12 months of planting and harvesting, and for that reason it is continuous work the year round. Another difficulty is that crops here are not usually planted one by one, but often two and sometimes three together. For that reason the data is not always correct. Also there are such an innumerable lot of small plots which makes it so much more difficult than when there are large fields.

However, the statistical work has been a great stimulus to crop production, and while we do not claim that the data is absolutely correct, we know that it is as accurate as could be expected under these circumstances, and a solid foundation on which to continue has been laid.

We are not at this time reporting on any but the ten so-called "frutos menores." We are, however, gathering statistics also of the "frutos mayores," as well as miscellaneous crops, but as the data is not complete we prefer to report on the rest at a later date, reporting now only the number of coconut plants, bananas, and plantains, and their present average production. (Table 4.)

*Live stock.*—In the latter part of December of 1917 and in January of this year a very complete statistic of live stock was obtained. A detailed report of that is given in table 6, and the data is self-explanatory.

There has been much agitation during the year about the importation of cattle for breeding and cattle for slaughtering, goats for milk, hogs, chickens, etc. This has all been carefully considered, and investigations have been made as to where any of these animals could be obtained. To begin with, it was found that no live stock except poultry could be imported from foreign countries, except under health regulations which could not be readily complied with.

Through the efforts of the War Department, Washington, D. C., and the Resident Commissioner to the United States, Hon. Félix Córdova Dávila, the importation of cattle for slaughter has been arranged with the Virgin Islands, and although no cattle has (at the time this report is made) been imported, it is the intention of the department of agriculture to do so, and with the object in view of reducing the cost of beef throughout the island. Arrangements are also now being made to bring in pure-bred poultry, of which eggs will be sold to the people of Porto Rico at reasonable rates for breeding purposes only.

Pure-bred milch goats have been very difficult to obtain, and the price is at present very high, but we have not given up hope of being able to buy a few.

Belgian hares will also be brought in very soon and sold at cost.

**Tick eradication.**—One of the greatest drawbacks to stock in Porto Rico is the presence of the cattle tick. As it is well known that any isolated region can be freed from that pest in the limited time of six months, and as the methods are well known, this department has made a special effort to disseminate that knowledge. A large illustrated poster was widely distributed over the island, and a special lecture on ticks was sent out. Later, when an agricultural conference was held in Mayaguez, a committee was appointed to outline a suitable scheme for exterminating the tick in Porto Rico. Mr. Henry C. Henriksen, director of this department, is chairman of that committee, and he reports that all the necessary data is now at hand, such as wholesale cost of chemicals, etc., and very shortly the committee will be ready to report.

**Special efforts to increase production.**—In the middle of February pledge cards were sent out to all agents, together with blank forms to be filled in at agricultural meetings. This was intended to stimulate planting during March and April. The lists received have been tabulated, and the figures are given in table 2, column 10. Another means for stimulating the agricultural work was the distribution of service buttons to those school children and small farmers that were most active in the propaganda. Twenty-five thousand such buttons were distributed, and the result has been most gratifying.

The catch phrase of this department, "There is no place for idle land nor for the idle man in Porto Rico," has been aptly translated into Spanish, and it has been used to very good effect.

It has not been possible to push the children's club work, such as poultry clubs, corn clubs, pig clubs, etc., but that will very soon be taken up as a special feature, as will also the city garden work where that is not yet developed.

Agricultural exhibitions have been arranged for in most districts, and this commission has granted prizes, hoping in that way to increase the supply as well as to stimulate the effort to produce a better quality.

**Publications.**—As mentioned before in this report, publications of various kinds have been furnished to the agricultural agents, teachers, and other cooperators. Three series of these publications have been issued in mimeographed form, viz, lectures, circulars, and charts.

#### LECTURES WITH LECTURE CHARTS.

- No. 1. Feed your soil if you want it to feed you.
- No. 2. Increase production.
- No. 3. Gardening.
- No. 4. Seed selection.
- No. 5. Potatoes.
- No. 6. Bat guano as a fertilizer.
- No. 7. Kill that tick.

#### CIRCULARS.

- No. 1. Storage of grains.
- No. 2. Sudan grass.
- No. 3. Velvet beans.
- No. 4. Peanut butter.
- No. 5. Soya beans.

#### SPECIAL CHARTS.

- No. 1. Imports, 1917.
- No. 2. Exports, 1917.
- No. 3. Planting table.

#### POSTERS.

An Appeal to Farmers. By President Wilson.  
The Mission of the Farmer. By David F. Houston, Secretary of Agriculture.  
Attention, farmers.  
Kill that tick.

**Market division.**—For the purpose of increasing the supply of garden truck, in order that the requirements of the cantonment would not be too great a drain on the city of San Juan, this department has urged its agents throughout the island to encourage the farmer to plant garden truck as well as staple food crops.

It has been found, that while most farmers are willing and ready to assist, that most of the lands are not suitable for this purpose, principally on account of lack of water, therefore this department leased a farm of more than 250 acres near the city of Aibonito, installed an irrigation system, and has already begun on an extensive scale the planting of all kinds of garden truck.

Market places for the sale of farm products of all kinds will shortly be erected in locations decided to be the best for the purpose, and where the farmer can bring his products to be sold directly to the consumer.

**Summary.**—The organization of this department, as it is to-day, is the result of a gradual development. The temporary organization lasting until September 1,

1917, was so successful, that the more permanent work could be continued without interruption. The scope of the work may be summed up in the rules formulated for the guidance of the agricultural agents: Urge production, give instruction, and obtain data.

The production of food crops has been greatly increased. Much idle land has been planted, and many people have been induced to plant who, for one reason or another, did not plant before. The slogan "There is no excuse for idle land nor for the idle man in Porto Rico" is now well known in the rural districts.

An idea of the amount of instruction given may be gained by referring to meetings held, demonstration plots, gardens, etc., and the data obtained has been tabulated. Table No. 2 of this report gives a detailed statement of results obtained. It shows that 72 municipalities out of the 75 on the island, not counting San Juan, has been covered by our field service with 35 agricultural agents and further:

Agricultural committees formed, 1,135.

Agricultural meetings held, 1,453.

Demonstration plots, 489.

Home gardens, 22,871.

School gardens, 1,410.

Acreage of food crops planted during the year, 334,725.

Seeds supplied on credit through the municipalities, \$14,099.34.

Table 4 shows the live-stock statistics with a total of 325,758 heads of horned stock, 72,259 heads of horses and mules, 102,336 heads of hogs, 49,127 heads of goats, and 976,048 heads of poultry.

Tables 1 and 3 give a detailed statement of acres planted. How much of that acreage is due to the effort of this department, we have no means of ascertaining, for there is no statistical data to compare with. It may be pertinent, however, to take one item; that of beans, for instance, and compare the production now with the import of the last couple of years.

The import of beans for the year ending June 30, 1916, was 6,696 tons, and for the year ending June 30, 1917, 7,480 tons. These figures include beans, peas, garbanzas, etc.

The production of beans and peas planted during the 7½ months previous to May 1, 1918, should amount to about 13,000 tons, or approximately twice as much as the annual import.

TABLE 1.—*Acres of food crops planted before Sept. 15, 1917.*

Municipalities.	Red beans.	White beans.	Peas (trifolios).	Pigeon peas (gandules).	Corn.	Rice.	Sweet potato.	Yautia.	Cassava.	Yams.	Total.
Adjuntas.....	195	339	16	233	111	77	263	188	53	4	1,479
Agüada.....	4	4	26	776	24	112	246	187	60	85	1,524
Agüey.....	94	761	267	526	1,039	.....	388	137	702	157	4,101
Agua Huenas.....	413	81	52	156	1,020	600	678	423	45	61	3,520
Albionito.....	462	92	.....	822	276	382	760	222	78	8	2,184
Añasco.....	.....	37	555	33	556	114	155	222	134	84	1,967
Arasco.....	90	320	.....	.....	.....	.....	775	160	119	10	2,752
Arroyo.....	.....	.....	.....	.....	40	2	34	8	.....	.....	88
Barceloneta.....	45	50	20	.....	75	.....	195	108	.....	12	505
Barranquitas.....	118	40	.....	3	248	638	511	164	4	.....	1,726
Barros.....	316	178	5	24	108	641	670	404	19	60	2,436
Bayamon.....	.....	19	.....	.....	361	255	244	244	94	.....	1,337
Cabo Rojo.....	13	105	85	238	2,840	22	455	5	75	.....	3,888
Caguas.....	67	62	18	84	583	549	166	166	176	.....	2,116
Camuy.....	100	644	270	250	333	80	726	240	176	126	2,943
Carolina.....	93	145	8	30	269	211	591	199	30	13	1,580
Cayey.....	410	30	19	101	611	287	444	83	.....	8	1,963
Cayey.....	.....	105	1	32	101	105	165	126	30	10	679
Cidra.....	87	609	101	.....	564	144	688	296	.....	.....	2,489
Cidra.....	348	6	.....	34	434	594	521	50	1	.....	1,988
Coamo.....	388	144	.....	13	1,257	133	163	106	42	187	2,433
Comerio.....	123	96	15	86	1,200	510	163	190	60	22	3,471
Corozal.....	2	135	27	21	1,170	324	1,646	110	38	25	1,507
Corozal.....	.....	.....	.....	.....	10	.....	8	.....	.....	.....	30
Dorado.....	3	14	8	17	62	40	119	40	7	1	311
Fajardo.....	75	68	.....	124	108	66	150	20	8	2	621
Guayama.....	109	144	.....	380	328	81	79	32	60	.....	1,191
Guayanilla.....	76	99	4	.....	229	26	35	24	.....	5	508
Guaynabo.....	117	81	120	36	832	156	134	77	13	2	1,887
Hadillo.....	45	398	369	83	261	17	408	98	78	17	1,788
Hormigueros.....	21	18	.....	63	18	.....	24	15	1	1	166
Humacao.....	9	102	17	71	346	319	408	123	119	36	1,863
Isabela.....	361	952	1,778	406	2,128	67	789	153	222	245	7,129
Jayuya.....	101	210	8	2	1,178	17	73	20	4	.....	517
Juana Diaz.....	341	301	66	105	1,178	48	252	200	86	95	2,672
Juncos.....	149	160	141	196	7,128	88	226	44	22	4	8,026
Lajas.....	25	626	565	196	200	22	31	.....	118	18	2,664
Lares.....	.....	.....	.....	218	246	152	1,060	118	118	2	3,026
Las Marias.....	43	53	32	373	150	215	138	204	13	86	2,991
Las Piedras.....	135	70	30	318	150	225	250	150	25	5	1,216
Lola.....	27	32	20	10	211	170	531	100	88	1	1,136
Loquillo.....	.....	.....	.....	21	86	43	163	163	25	10	464
Manati.....	34	153	106	13	146	4	106	23	.....	.....	592

	7	26	82	68	25	53	302
Maricao.....	110	40	165	0	0	53	546
Manabo.....	83	30	140	100	20	80	716
Mayaguez.....	53	30	500	500	600	400	4,726
Mocva.....	725	250	500	500	600	400	1,185
Monay.....	217	144	582	95	75	7	1,130
Naguabo.....	224	51	226	135	72	83	2,268
Naranjito.....	97	50	915	100	100	50	1,126
Patillas.....	200	160	374	70	205	130	2,306
Penuelas.....	10	100	143	97	415	113	4,050
Ponce.....	875	330	319	415	171	54	3,233
Quebradillas.....	685	100	458	181	64	175	2,099
Rincon.....	819	37	403	95	137	25	2,372
Rio Grande.....	61	556	579	641	25	5	1,186
Rio Piedras.....	12	8	20	20	8	6	1,245
Sabana Grande.....	20	39	144	40	59	21	1,497
Sabana Herman.....	36	89	175	88	89	61	4,386
San German.....	110	255	855	365	65	50	5,833
San Lorenzo.....	505	800	1,104	506	621	175	6,405
San Sebastian.....	16	296	1,105	70	10	3	32
Tos Alta.....	35	37	22	70	5	.....	1,436
Tos Baja.....	38	70	510	220	28	.....	5,274
Trujillo Alto.....	185	230	3,544	238	146	99	6,367
Utusado.....	204	212	126	27	.....	6	1,762
Vega Alta.....	16	130	383	135	35	68	1,220
Vega Baja.....	199	60	35	6	48	53	1,416
Vieques.....	60	244	156	34	88	42	1,215
Villalba.....	238	205	447	158	135	17	8,454
Yabucoa.....	17	133	229	79	.....	.....	137,273
Yauco.....	128	133	229	79	.....	.....	.....
Total.....	7,701	12,463	25,746	9,997	5,731	3,425	137,273

TABLE 2.—*Agents, agricultural committees, meetings, gardens, acreage, and seeds sold on credit.*

Municipalities.	Agricultural agent.	Agricultural committees.	Agricultural meetings held Sept. 1, 1917, to Apr. 30, 1918.	Demonstration plots.	Home gardens.	School gardens.	Acreage of food crops planted on and before Sept. 15, 1917.	Acreage of food crops planted Sept. 15, 1917—Apr. 30, 1918.	Acres pledged for spring planting.	Seeds sold on credit.
										Value.
Adjuntas.....	Pedro Vélez.....	22	30	29	900	23	1,479	8,295	3,383	\$1,823.51
Aguada.....	Nestor Gastambide.....	19	4	1	87	19	1,524	2,702	1,885	
Aguadilla.....	Fernando Milán.....	15	56	3	508	18	4,101	6,715	1,199	
Agua Buenas.....	Antonio D. Nieves.....	11	19	16	100	12	3,523	1,464	2,379	19.50
Albionito.....	Domingo Colón.....	10	16	9	60	12	2,184	1,691	3,787	545.06
Anasco.....	Nestor Gastambide.....	23	20	4	175	23	1,987	2,921	2,283	300.24
Areibo.....	C. Arturo Figueroa.....	39	33	13	650	43	2,732	5,528	4,127	237.50
Arroyo.....	Francisco Pagan.....	16	16	3	112	9	2,786	1,036	1,023	629.23
Barceloneta.....	Juan C. Forestier.....	12	6	10	148	13	505	1,108	925	
Barranquitas.....	Domingo Colón.....	12	40	14	70	15	1,726	1,367	2,438	72.75
Barros.....	Olímpio S. Fortis.....	27	15	14	470	15	2,425	1,367	2,438	254.76
Bayamon.....	Alfredo Molina.....	29	68	29	427	31	2,425	1,907	3,034	
Cabo Rojo.....	Pedro Olivencia.....	13	19	24	262	20	1,327	2,622	3,031	
Caguas.....	Salvatore Barea.....	21	23	16	865	25	3,838	5,414	3,492	63.75
Camuy.....	Felipe A. Martínez.....	30	49	3	256	29	2,116	2,368	2,524	14.00
Carolina.....	Gregorio H. Batista.....	16	9	22	210	13	2,948	3,102	2,972	302.20
Cayey.....	José J. Escribano.....	19	34	3	332	23	1,589	2,043	2,972	891.37
Cebal.....	Guillermo Encarnación.....	21	24	5	256	22	1,993	2,561	2,428	942.63
Ciales.....	Guillermo Encarnación.....	6	5	4	108	7	679	242		
Cidra.....	Graciano Arellano.....	19	32	9	600	29	2,988	1,968	484	
Coamo.....	José J. Escribano.....	12	19	4	194	13	1,988	1,434	1,090	70.00
Comerio.....	Julio S. Simons.....	23	30	5	187	22	2,433	3,959	1,680	52.00
Corozal.....	Antonio D. Nieves.....	10	13	24	136	27	3,471	2,434	1,601	
Dorado.....	Angel M. Padón.....	16	31	7	223	16	1,507	2,118	1,282	50.05
Fajardo.....	Onofre Colón Torres.....	6	12		325	10	30	691	516	
Florida.....	Guillermo Encarnación.....	12	6	5	199	9	311	555	292	
Guadalupe.....	Guillermo Encarnación.....	3	1	2	60	2		1,909	136	68.25
Guayama.....	Francisco Pagan.....	10	6	2	91	13	621	1,854	401	10.00
Guayanilla.....	Adro Feliciano.....	17	9	1	158	17	1,191	2,140		
Guaynabo.....	Alfredo Molina.....	11	15	12	101	12	1,508	2,758	1,438	
Habla.....	Tomás G. Anillo.....	14	12	4	225	14	1,587	1,267	3,074	45.60
Haguirre.....	Felipe A. Martínez.....	12	10	11	87	6	1,785	3,305	2,262	31.00
Huachuco.....	Fernando Oliver.....	5	5	2	124	12	1,635	1,423		
Isabala.....	Guillermo Encarnación.....	8	16	4	134	23	1,623	2,932	1,076	
Jayuya.....	Francisco Pagan.....	25	36	4	341	24	7,129	2,100	1,137	
Juncos.....	Pedro Olivencia.....	11	8	5	643	15	3,511	1,943	1,925	
Juncos Diaz.....	Pedro Olivencia.....	20	13	2	72	19	2,072	1,881	1,089	
Lajas.....	Tomás G. Anillo.....	11	22	2	276	10	1,035	1,086	1,451	15.00
Late.....	Pedro Olivencia.....	15	17	14	441	22	8,003	2,139	1,423	
Loreto.....	Juan Ellis.....	27	57	5	1,713	33	2,964	5,581	2,262	897.36

Las Marias.....	16	13	2	55	26	1,216	8,817	2,581	241.87
Las Piedras.....	11	16	1	86	14	2,433	2,573	1,573	
Lota.....	12	15	11	571	23	1,136	1,775		
Loquillo.....	6	1	3	160	89	464	813	294	
Manati.....	18	10	13	183	23	692	2,102	1,336	
Manabo.....	13	21	3	600	19	368	1,395	1,554	
Mayaguez.....	7	15	1	56	7	545	1,021	1,430	
Moca.....	20	28	12	297	26	716	4,916		140.00
Morovis.....	11	20		268	15	4,225	4,196		753.11
Naguabo.....	17	23	4	300	17	1,185	2,009	842	389.28
Naranjito.....	9	9	1	86	14	1,130	2,672		
Pedraza.....	10	5	12	114	16	2,268	1,516	468	104.88
Pedraza.....	12	13		138	13	1,128	1,476	276	
Ponce.....	17	23	1	440	17	2,306	1,865	2,550	213.00
Quebradillas.....	47	46	1	173	54	4,060	8,234		168.52
Rio Grande.....	11	8	2	26	10	2,099	1,970	172	
Rio Piedras.....	14	12		542	19	2,372	2,198		
Sabana Grande.....	11	6	2	591	24	136	905	599	
San German.....	13	11	5	299	31	1,745	2,057	3,188	
San Lorenzo.....	19	43	17	233	30	1,477	4,214	1,863	99.50
San Sebastian.....	15	38		244	19	4,895	7,899		2,764.99
Santa Isabel.....	28	43	11	1,142	27	5,833	7,895		8.28
Tos Baya.....	15	20		525	17	495	1,642	1,595	
Turkey.....	8	25		460	12	32	326	366	
Turkey Alto.....	8	4	1	388	12	1,436	1,405	143	
Utuado.....	40	38	2	1,010	40	5,274	8,952	4,392	1,596.75
Vega Alta.....	9	16		400	11	867	719	332	
Vega Baja.....	17	19	12	215	17	1,762	2,033		6.37
Vieques.....	8	7	3	165	10	1,220	2,464	437	
Villalba.....	11	10	7	180	14	1,415	1,599	8,059	67.50
Yabucoa.....	19	40	5	150	19	1,215	4,262	2,114	
Yauco.....	20	9	7	916	33	3,454	9,142	5,186	793.11
Total.....	1,135	1,453	499	22,871	1,410	137,273	197,452	94,355	14,099.34



TABLE 3.—Acreage of food crops planted from Sept. 15, 1917, to Apr. 30, 1918.

Municipalities.	Red beans.	White beans.	Peas (trifolies).	Pigeon peas (gandules).	Corn.	Rice.	Sweet potato.	Yanitas.	Cassava.	Yams.	Total.
Adjuntas.....	836	886	20	161	604	63	300	338	55	23	3,296
Aguada.....	416	448	238	401	291	55	178	315	171	159	2,702
Aguadilla.....	548	994	438	405	1,363	2	880	181	1,530	284	6,715
Agua Buenas.....	238	147	21	53	405	133	221	150	52	14	1,434
Albionito.....	481	122	1	26	430	125	286	258	8	4	1,691
Anasco.....	814	354	99	149	476	131	224	367	290	187	2,921
Arecibo.....	689	1,012	466	54	1,840	14	1,301	887	139	76	6,538
Arroyo.....	462	72	8	54	211	14	139	28	41	82	1,106
Barceloneta.....	196	199	78	32	184	82	314	181	98	26	1,108
Barraquitas.....	370	119	5	17	356	121	197	122	17	47	1,867
Bayamon.....	469	240	72	44	648	95	67	296	355	126	2,622
Cabo Rojo.....	212	268	260	283	2,541	121	625	171	118	6	2,898
Caguas.....	319	250	81	314	781	147	442	123	10	97	3,102
Camuy.....	383	473	186	168	458	34	561	160	100	56	3,043
Carulla.....	830	494	30	100	495	89	735	180	117	6	3,591
Cayey.....	835	102	30	132	897	140	152	32	5	16	1,901
Cebay.....	52	206	11	14	70	80	158	122	2	19	1,483
Ciales.....	346	510	58	20	338	9	235	15	8	6	1,483
Cidra.....	498	38	2	10	490	110	250	243	92	24	2,934
Coamo.....	851	530	34	141	1,513	140	371	243	92	13	3,982
Comerio.....	594	171	42	112	885	64	361	153	44	19	2,434
Corozal.....	152	423	33	26	868	121	290	163	46	19	2,118
Dorado.....	47	134	23	40	60	9	148	63	21	33	591
Fajardo.....	47	193	2	9	86	14	132	49	17	1	555
Guajama.....	130	92	153	154	1,312	35	82	82	47	2	1,909
Guayanilla.....	453	217	30	246	235	35	408	64	88	58	1,854
Guaynabo.....	542	297	740	331	740	43	945	330	99	5	2,140
Gurabo.....	154	140	13	335	210	26	255	144	324	247	2,758
Hatillo.....	266	139	20	38	334	10	624	98	15	21	2,267
Hormigueros.....	446	970	233	119	618	4	193	133	133	147	3,305
Huacabo.....	430	85	63	133	155	486	646	117	324	147	4,233
Isabela.....	263	458	62	64	349	13	183	217	303	242	3,932
Jayuya.....	822	1,015	514	514	1,738	13	1,684	166	8,100	16	8,100
Juncos.....	536	1,652	870	138	3,707	15	1,157	192	45	1	1,968
Juana Diaz.....	565	1,390	20	73	1,227	127	303	58	124	78	3,361
Junco.....	189	565	72	138	1,227	42	296	73	10	1	1,065
Lajas.....	178	138	25	25	157	30	213	14	54	233	3,139
Lares.....	1,968	1,376	70	198	1,249	80	797	461	161	233	6,881
Las Marias.....	826	178	70	560	1,166	139	226	439	105	215	3,817
Las Piedras.....	199	346	74	480	854	450	336	197	34	34	2,433
Loiza.....	218	276	56	99	321	87	427	166	158	36	1,775
Luquillo.....	14	44	5	18	33	31	500	139	28	1	813
Manati.....	352	468	163	73	208	21	533	91	40	84	2,102

Maricao.....	354	204	39	164	311	33	76	114	32	68	1,895
Maunabo.....	156	82	5	40	214	196	176	87	10	55	1,021
Mayaguez.....	992	294	161	650	491	135	802	502	252	637	4,916
Moca.....	496	961	82	481	868	83	247	351	309	318	4,196
Merced.....	338	461	52	55	261	85	445	155	45	22	2,009
Minerva.....	156	542	158	63	425	146	701	347	110	24	2,672
Naguabo.....	83	291	36	108	516	36	212	133	77	24	1,516
Naranjito.....	830	253	9	57	267	67	296	96	33	68	1,476
Patillas.....	244	429	4	265	669	5	72	33	104	10	1,865
Ponce.....	1,740	1,050	190	714	2,092	816	580	496	685	371	8,234
Quebradillas.....	366	509	66	115	315	11	330	60	81	117	1,970
Rincon.....	483	142	32	308	387	15	118	177	63	111	1,836
Rio Grande.....	804	307	98	92	313	204	510	246	89	35	2,198
Rio Piedras.....	98	131	31	40	111	55	211	141	56	32	906
Sabana Grande.....	836	419	58	612	838	12	144	46	105	24	3,067
San German.....	1,176	699	196	604	897	214	316	230	75	174	4,214
San Lorenzo.....	168	152	155	90	397	187	895	177	18	32	1,669
San Sebastian.....	683	2,275	85	509	1,623	187	462	833	490	315	7,945
San Juan.....	42	396	76	45	264	26	3	225	87	19	1,542
Tos Alta.....	37	134	42	12	3	5	3	41	41	8	326
Trujillo Alto.....	317	149	45	155	253	29	293	159	80	35	1,405
Utuado.....	1,602	1,506	474	612	1,599	272	1,493	723	383	243	8,832
Vega Alta.....	57	202	29	14	104	2	166	61	10	14	719
Vega Baja.....	179	499	170	80	210	23	623	170	52	27	2,033
Vega Baja.....	48	42	10	31	133	1	137	2	26	2	534
Villa Clara.....	157	395	46	88	551	77	136	76	59	66	1,599
Yabucoa.....	739	457	40	92	794	553	1,023	231	173	58	4,393
Yauco.....	1,508	978	251	2,431	2,268	236	1,700	293	376	100	9,142
Total.....	34,151	31,011	7,464	14,883	45,134	6,534	29,563	13,267	9,403	6,022	197,452

TABLE 4.—Coconuts, bananas, plantains, statistics, June, 1918.

Municipalities.	Coconuts.		Bananas.		Plantains.		
	Number of trees bearing.	Young trees bearing.	Yield per tree.	Plants.	Varieties.	Per 100 plants.	Size of bunches.
Adjuntas.....	52	10	36	Number. 1,814,400	Maño, Montecristo, Morado, Gigante, Nifo, Enano, Manzano.	Bunches. 100	80-200
Aguada.....	22,970	18,138	35	12,000	Guano, Enano, Chamaluco.	80	80
Aguadilla.....	28,610	42,020	60	151,500	Enanos, Maño, Manzano.	100	2,500
Agua Buenas.....	164	76	40	805,200	Gigante, Datil, Enano, Manzano.	92	355,675
Albionito.....	11,153	6,241	33	632,500	Malango, Enano, Gigante, Datiles, Morado.	76	167,000
Asasno.....	20,250	3,100	100	1,278,220	Guano, Morado, Chamaluco, Bolo.	76	12,500
Arecibo.....	21,193	3,246	80	290,000	Morado, Nifo, Guaran.	100	36,866
Arroyo.....	10,000	1,500	90	11,450	Gigante, Enano, Malango.	20	10,000
Barceloneta.....	27	16	14	30,000	Guano, Chamaluco, Nifo.	80	40
Barranquitas.....	85,091	45,957	45	412,500	Malango, Enano, Gigante, Datiles, Morado.	76	12,500
Cabo Rojo.....	868	490	45	11,600	Enano, Chamaluco, Maño.	110	90,000
Caguas.....	2,860	3,500	40	133,500	Malango, Gigante, Datiles, Manzano.	100	90,000
Camuy.....	12,179	24,762	45	290,000	Gigante, Nifo, Enano, Vinagre.	76	1,012,500
Carolina.....	73	96	30	57,852	Maño, Enano, Datiles.	150	8,075
Cayey.....	2,997	1,927	95	1,856,087	Maño, Enano, Datil, Rayo, Manzano, Jicante.	75	87,500
Celba.....	125	133	80	16,103	Malango, Enano, Manzano, Mani, Gigante.	80	11,014
Ciales.....	13	24	30	1,295,900	Gigante, Nifo, Morado, Maño.	80	302,467
Cidra.....	160	86	35	849,547	Jicante, Enano, Datiles, Rayo, Maño, Manzano.	75	8,514
Coeamo.....	108	60	25	500,000	Gigante, Enano, Datil, Malango.	75	45
Comerio.....	1,200	700	65	476,400	Gigante, Enano, Malango, Datil.	90	15,500
Corozal.....	45,735	14,432	160	800,000	Maño, Gigante.	90	70,000
Dorado.....	3,365	3,372	100	7,775	Chamaluco, Gigante, Morado.	80	785
Fajardo.....	3,585	3,246	45	17,467	Chamaluco, Enano, Mani, Gigante.	85	9,067
Guadalupe.....	9,575	7,732	100	235	Gigante, Nifo.	76	162
Guayama.....	4,500	10,000	120	117,500	Malango, Enano, Gigante, Morado.	30	1,000
Guaynabo.....	733	972	43	180,000	Martines, Gigante, Enano.	149	43,500
Hurao.....	3,460	3,500	40	82,588	Maño, Datil, Gigante.	70	20,536
Insua.....	32,610	3,460	55	185,000	Gigante, Enano, Maño.	78	12,000
Juncos.....	104	12	33	185,000	Maño, Enano, Gigante, Pita.	100	13,000
Lajas.....	3,101	2,476	80	71,500	Gigante, Nifo, Maño, Montecristo, Morado, Enano, Manzano.	100	146,800
Lares.....	1,027	1,047	80	1,01,260	Maño, Enano, Manzano.	95	199,950
Maricao.....	2,120	2,476	80	799,800	Martines, Maño.	75	199,950
Mayaguez.....	20,150	6,170	33	58,795	Maño, Datil, Gigante.	110	17,806
Medina.....	569	481	40	3,685	Enano, Maño.	80	2,873
Patillas.....	1,027	1,047	80	799,800	Montecristo, Gigante, Verdino, Piche.	25	302,421
Pinar.....	1,027	1,047	80	799,800	Maño, Enano, Manzano.	95	199,950
Ponce.....	2,120	2,476	80	58,795	Maño, Datil, Gigante.	75	199,950
San Juan.....	20,150	6,170	33	3,685	Enano, Maño.	110	17,806
San Lorenzo.....	569	481	40	3,685	Montecristo, Gigante, Verdino, Piche.	25	302,421
San Pedro.....	1,027	1,047	80	799,800	Maño, Enano, Manzano.	95	199,950
San Rafael.....	2,120	2,476	80	58,795	Maño, Datil, Gigante.	75	199,950
Sancti Spiritus.....	20,150	6,170	33	3,685	Enano, Maño.	80	2,873
Sancti Spiritus.....	569	481	40	3,685	Montecristo, Gigante, Verdino, Piche.	25	302,421
Sancti Spiritus.....	1,027	1,047	80	799,800	Maño, Enano, Manzano.	95	199,950
Sancti Spiritus.....	2,120	2,476	80	58,795	Maño, Datil, Gigante.	75	199,950
Sancti Spiritus.....	20,150	6,170	33	3,685	Enano, Maño.	80	2,873
Sancti Spiritus.....	569	481	40	3,685	Montecristo, Gigante, Verdino, Piche.	25	302,421
Sancti Spiritus.....	1,027	1,047	80	799,800	Maño, Enano, Manzano.	95	199,950
Sancti Spiritus.....	2,120	2,476	80	58,795	Maño, Datil, Gigante.	75	199,950
Sancti Spiritus.....	20,150	6,170	33	3,685	Enano, Maño.	80	2,873
Sancti Spiritus.....	569	481	40	3,685	Montecristo, Gigante, Verdino, Piche.	25	302,421

Las Marias.....	37	14	2,990,375	Gigante, de Rosa, Colorados.....	80	80	18,745	Bobos, Congo.....	75
Las Piedras.....	576	362	50,000	Mañabo, de Pina, Enano, Gigante.....	100	80	10,000	Johnson.....	75
Lotea.....	135,540	9,000	85,000	Enano, Quientes, Gigante.....	80	75	20,000	Enano.....	75
Luzillo.....	23,138	14,304	13,102	Chamalucio, Enano, Datil, Gigante.....	80	75	6,839	Enano.....	75
Manatí.....	8,436	11,000	90	Guaranés, Enano, Nifio.....	80	65	7,000	Congo, Enano.....	60
Maricao.....	24	9	1,580,625	Gigante, de Rosa, Colorado.....	80	85	6,250	Bobo, Congo.....	75
Manabo.....	933	700	8,200	Gigante, de Pina, Morado, Gigante.....	100	75	1,000	Congo, Tresciente.....	100
Mayaguez.....	22,674	10,068	50,000	Chamalucio, Gigante, Enano, Manzano, de Rosa, Nifio.....	50	90	40,000	Congo, Tresciente.....	70
Moca.....	100	800	407,000	Gigante, Enano, Guaranés, Nifio, Mañabo, Manzana, Mañabo.....	85	85	75,000	Musa Sapiente, Martinea.....	80
Morovis.....	500	1,500	600,000	Gigante, Mañabo.....	80	70	58,554	Maricongo, Congo, Dominicana.....	75
Naguabo.....	5,462	5,750	19,500	Mañabo, Gigante, de Pina.....	80	65	6,000	Johnson.....	70
Narajito.....	239	103	452,403	Gigante, Malango, Manzano, Morado.....	85	55	44,750	Congo.....	65
Pailitas.....	13,150	967	56,342	Enano, Gigante, Malango, Morado.....	45	70	14,000	Congo, Largo.....	80
Perdenas.....	3,100	1,500	3,698,615	Martinea, Enano, Gigante, Mañabo.....	140	75	312,500	Congo, Largo.....	80
Ponce.....	5,598	2,098	45	Gigante, Nifio, Morado, Piche.....	75	80	1,300	Del Pals.....	75
Rio Grande.....	10,170	5,583	30	Guaran, Enano, Chamalucio.....	80	75	35,000	Platano Comun, Congo, Enano.....	85
Rio Piedras.....	38,250	4,500	92,324	Enano, Quiniento, Gigante.....	95	60	42,500	Enano, Congo, Halton.....	60
Sabana Grande.....	1,159	21,547	75,000	Gigante, Enano, Fonongo.....	5	70	4,375	Congo, Maricongo, Legitimo.....	4
Saltinas.....	2,000	193	261,000	Guaran, Enano, Manzano.....	150	30	7,600	Congo, Maricongo, Legitimo.....	10
San German.....	5,534	5,000	60	Malango, Gigante.....	100	80	125	Congo, Maricongo, Legitimo.....	100
San Lorenzo.....	650	2,375	680	Enano, Guaran, Manzano.....	7	75	285,000	Congo, Maricongo, Tresciente, Enano.....	80
San Sebastian.....	468	387	2,200,000	Gigante, Montecristo, Verdino, Manzano, Chumbo.....	22	65	200	Congo, Enano.....	80
Santa Isabel.....	2,500	2,000	8,000	Malango, Morado, Chamalucio.....	150	45	1,245	Congo, Enano.....	75
Tea Alta.....	3,250	2,280	35,985	Gigante, Morado, Chamalucio.....	75	40	550	Congo, Enano.....	70
Tea Baja.....	35,982	12,345	3,500	Gigante, Chamalucio, Manzano.....	70	50	46,875	Enano, Congo, Haltones.....	60
Trujillo Alto.....	5,823	2,689	100	Gigante, Enano, Datil, Nifio.....	95	130	2,894,902	Congo, Enano.....	85
Utuado.....	200	48	3,323,624	Gigante, Piche, Morado, Nifio.....	85	40	9,675	Congo, Enano.....	60
Vega Alta.....	7,800	825	150	Chamalucio, Gigante, Morado.....	80	75	6,000	Congo.....	75
Vega Baja.....	14,000	12,780	24,000	Chamalucio, Guaran, Nifio.....	75	60	3,235	Blanco, Congo.....	95
Vieques.....	7,628	31,051	14,992	Manchoso, Gigante, Enano.....	90	50	242,150	Congo, Maricongo.....	100
Villalba.....	64	101	888,600	Martinea, Gigante.....	100	75	1,000	Congo, Platano.....	65
Yabucoa.....	4,300	700	5,000	Malango, de Pina, Morado, Gigante.....	75	70	48,554	Comunes, Congo, Enano.....	172
Yauco.....	2,200	640	415,110	Gigante, Nifio.....	75	70	7,617,397		
Total.....	736,091	417,019	166		181	171			

Average.

TABLE 5.—Live stock statistics taken in January, 1918.

Municipalities.	Cows.	Oxen.	Calves.	Total horned stock.	Horses.	Mules.	Total horses and mules.	Pigs.	Poultry.	Goats.
Adjuntas.....	692	459	987	2,138	1,293	120	1,413	3,740	29,960	250
Aguada.....	546	1,275	583	2,404	648	43	691	1,250	13,729	812
Aguadilla.....	5,041	6,880	4,294	16,185	3,428	119	3,547	8,597	84,037	4,024
Agua Buenas.....	1,232	684	1,205	3,121	661	20	681	1,068	11,956	339
Albionito.....	1,647	780	610	3,037	640	57	697	1,373	11,667	228
Anasco.....	574	247	515	1,316	520	42	562	1,069	12,843	905
Arrebo.....	2,879	3,476	2,064	8,419	2,017	940	2,957	3,019	16,700	1,368
Barceloneta.....	283	1,260	206	1,759	320	2	322	451	7,060	1,842
Barranquitas.....	416	671	421	1,508	802	10	812	359	2,960	301
Barreros.....	653	322	552	1,527	864	10	874	688	8,222	289
Cajon.....	2,141	751	1,383	4,276	1,080	196	1,276	1,900	26,346	384
Cajon Rojo.....	2,128	1,822	5,427	14,556	1,753	10	1,763	1,900	10,663	960
Caguas.....	2,463	3,211	2,429	7,700	1,312	88	1,407	1,772	15,263	140
Caguay.....	2,263	1,039	3,445	6,747	1,314	113	1,427	2,371	15,211	582
Carolina.....	3,808	1,021	3,729	8,558	1,117	173	1,290	2,718	35,241	983
Cayey.....	1,608	1,421	1,178	4,207	669	31	700	1,308	8,885	1,097
Cayey.....	1,419	1,043	1,178	3,640	609	42	651	1,649	26,404	607
Ceballos.....	420	1,414	311	2,545	322	973	1,233	223	4,500	264
Cidras.....	700	864	468	1,960	760	573	1,333	586	14,881	367
Cidras.....	889	931	574	2,394	510	5	515	841	14,881	367
Comerio.....	3,386	3,173	5,222	11,781	2,268	878	3,146	8,018	26,500	1,012
Comerio.....	1,073	770	1,680	3,523	637	72	709	1,202	11,818	235
Corosal.....	1,524	1,184	1,218	3,926	837	87	924	1,486	11,248	355
Dorado.....	1,489	1,864	1,211	3,564	294	13	307	675	8,020	404
Fajardo.....	666	6,924	8,111	21,501	566	84	650	228	5,022	4,564
Guadalupe.....	153	2,960	388	3,499	95	130	224	28	6,280	280
Guayanilla.....	693	3,347	559	3,540	467	119	586	1,741	6,967	300
Guaynabo.....	1,493	1,547	1,310	4,350	708	708	1,416	9,018	9,867	583
Guirano.....	1,687	2,005	1,230	4,922	901	188	1,089	1,442	16,357	624
Hatillo.....	1,725	1,608	1,452	4,785	595	9	604	1,905	26,987	746
Hormigueros.....	337	1,165	218	1,720	268	37	305	847	7,608	335
Huachuco.....	2,604	2,690	2,178	6,572	1,693	244	1,937	1,330	14,822	608
Humacao.....	1,336	1,535	1,594	4,465	1,870	9	1,879	1,333	15,074	648
Isabela.....	444	258	590	1,292	75	53	128	533	18,900	140
Jayuya.....	1,468	1,026	1,072	3,566	634	187	821	900	7,229	375
Juana Diaz.....	997	2,103	1,668	3,768	508	148	656	532	6,116	688
Juncos.....	4,856	3,300	3,229	11,385	1,812	84	1,896	2,660	21,290	2,011
Leales.....	994	414	557	1,965	1,804	416	2,220	2,763	31,157	194
Lares.....	313	206	1,707	2,226	425	253	678	479	5,661	673
Las Marias.....	1,612	2,206	1,576	5,394	1,792	49	1,841	1,639	12,323	476
Las Piedras.....	2,390	2,376	2,025	6,791	1,792	17	1,809	1,639	26,518	521
Lola.....	636	1,940	441	3,026	1,280	17	1,297	879	8,713	441
Loquillo.....										

Manati.....	1,293	1,237	959	3,464	725	39	764	712	7,832	655
Maricao.....	156	49	128	1,333	234	180	414	165	3,234	89
Mamabo.....	168	1,040	139	1,397	181	180	185	249	3,911	248
Mayaguez.....	1,171	1,597	704	3,472	1,124	332	1,466	2,215	26,948	1,315
Moca.....	1,698	2,710	1,590	6,068	3,698	204	3,802	6,642	19,607	698
Morovis.....	1,006	666	735	2,520	513	101	619	1,042	6,263	418
Naguabo.....	2,670	5,736	4,230	12,659	2,055	.....	2,065	2,311	12,314	118
Naranjito.....	1,625	1,670	1,086	2,781	641	3	544	880	10,433	288
Patillas.....	820	1,831	732	2,433	842	29	871	1,434	17,380	616
Penuelas.....	2,583	1,403	716	2,652	572	853	644	2,968	13,317	564
Ponce.....	2,785	4,269	1,513	5,607	2,909	853	3,742	1,946	14,017	1,072
Quebradillas.....	318	637	378	2,176	2,409	27	444	832	2,239	677
Rio Piedra.....	4,030	3,550	2,806	1,174	1,374	13	244	559	8,477	611
Rio Grande.....	1,030	3,680	2,301	10,501	1,874	13	1,682	838	16,474	468
Rio Piedras.....	1,551	1,793	1,374	5,501	878	9	1,085	430	7,043	413
Salinas Grande.....	2,024	2,453	1,494	5,903	546	22	571	1,400	11,451	413
San German.....	1,819	2,462	1,300	5,604	1,115	68	1,133	3,290	29,248	1,031
San Lorenzo.....	1,657	4,396	1,101	5,404	1,715	35	810	1,072	15,102	1,338
San Sebastian.....	2,204	1,230	1,747	5,181	1,534	135	1,659	4,380	24,725	1,204
Toca Alta.....	1,135	1,885	1,715	3,735	530	.....	520	470	8,400	410
Toca Baja.....	1,245	1,055	2,900	5,299	215	6	220	225	4,900	351
Trujillo Alto.....	958	978	2,707	2,641	615	.....	515	674	8,554	351
Utuado.....	2,994	1,254	1,465	5,733	2,169	404	2,573	3,150	27,990	971
Vega Alta.....	915	1,265	1,145	3,245	319	7	326	392	6,725	338
Vega Baja.....	878	1,077	1,609	2,404	599	90	689	573	6,772	603
Vieques.....	1,190	2,892	952	5,034	646	7	633	311	3,831	592
Villalba.....	1,650	3,875	643	1,668	421	177	598	528	3,583	390
Yabucoa.....	2,184	2,130	1,579	5,893	979	24	1,003	1,129	12,752	1,165
Yauco.....	1,249	1,314	1,153	3,716	911	246	1,157	1,360	13,457	574
Total.....	107,453	123,259	95,046	325,758	62,954	9,305	73,259	102,336	976,084	49,127

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918.

## BREAD AND BISCUITS.

	Quantity.	Value.		Quantity.	Value.
<b>1916.</b>	<i>Pounds.</i>		<b>1917.</b>	<i>Pounds.</i>	
May.....	270,404	\$26,899	May.....	550,056	\$59,908
June.....	188,570	19,845	June.....	483,883	59,290
July.....	449,901	44,182	July.....	453,901	50,198
August.....	286,110	28,569	August.....	430,876	45,791
September.....	417,505	40,856	September.....	588,773	60,573
October.....	453,882	46,146	October.....	367,990	61,745
November.....	725,474	70,251	November.....	223,639	28,305
December.....	780,932	79,185	December.....	156,479	19,746
<b>1917.</b>			<b>1918.</b>		
January.....	529,160	53,253	January.....	276,619	36,298
February.....	306,080	31,145	February.....	24,720	3,099
March.....	419,991	43,114	March.....	7,859	1,333
April.....	583,593	56,439	April.....	156,910	25,609
<b>Total.....</b>	<b>5,390,602</b>	<b>539,584</b>	<b>Total.....</b>	<b>3,911,706</b>	<b>451,890</b>

## CORN MEAL.

	<i>Barrels.</i>			<i>Barrels.</i>	
<b>1916.</b>			<b>1917.</b>		
May.....	5,107	\$17,426	May.....	5,632	\$41,641
June.....	6,586	24,939	June.....	9,974	53,214
July.....	9,266	37,234	July.....	2,976	24,715
August.....	3,344	13,339	August.....	1,556	14,953
September.....	5,199	22,972	September.....	2,953	24,795
October.....	5,102	25,081	October.....	1,756	16,036
November.....	5,919	29,794	November.....	650	5,248
December.....	7,288	37,789	December.....	80	732
<b>1917.</b>			<b>1918.</b>		
January.....	2,280	11,787	January.....	26	285
February.....	2,825	14,397	February.....	23	240
March.....	12,871	66,070	March.....	939	9,897
April.....	8,668	59,754	April.....	2,492	24,658
<b>Total.....</b>	<b>74,455</b>	<b>360,582</b>	<b>Total.....</b>	<b>29,118</b>	<b>246,414</b>

## OATS.

	<i>Bushels.</i>			<i>Bushels.</i>	
<b>1916.</b>			<b>1917.</b>		
May.....	22,207	\$12,530	May.....	24,059	\$19,741
June.....	23,314	12,470	June.....	6,574	5,281
July.....	12,948	6,972	July.....	2,710	2,369
August.....	15,515	8,420	August.....	1,174	1,041
September.....	16,146	9,284	September.....	28,531	21,810
October.....	21,326	12,425	October.....	37,115	28,216
November.....	20,414	12,477	November.....	13,832	10,771
December.....	14,819	9,362	December.....	6,767	5,475
<b>1917.</b>			<b>1918.</b>		
January.....	8,241	5,527	January.....	500	575
February.....	10,797	8,423	February.....	4,481	4,433
March.....	29,871	20,842	March.....	9,114	10,494
April.....	20,195	17,607	April.....	5,434	6,487
<b>Total.....</b>	<b>215,793</b>	<b>136,319</b>	<b>Total.....</b>	<b>140,611</b>	<b>116,663</b>

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## PREPARATIONS OF OATS FOR TABLE FOOD.

	Quantity.	Value.		Quantity.	Value.
1916.	Pounds.		1917.	Pounds.	
May.....		\$7,582	May.....		\$8,469
June.....		7,139	June.....		9,496
July.....		5,765	July.....		10,714
August.....		5,320	August.....		10,785
September.....		5,861	September.....		8,028
October.....		4,935	October.....		32,216
November.....		11,225	November.....		16,321
December.....		11,488	December.....		8,145
1917.			1918.		
January.....		10,086	January.....		5,221
February.....		7,966	February.....		10,052
March.....		5,388	March.....		16,633
April.....		7,197	April.....		12,384
Total.....		89,952	Total.....		148,464

## RICE.

1916.	Pounds.		1917.	Pounds.	
May.....	9,224,794	\$388,256	May.....	12,899,825	\$771,643
June.....	10,492,900	407,556	June.....	9,384,617	590,177
July.....	8,444,100	315,538	July.....	4,299,556	265,947
August.....	4,584,246	188,192	August.....	3,425,819	236,774
September.....	7,090,580	275,027	September.....	6,799,837	490,794
October.....	10,721,504	416,702	October.....	15,655,945	1,083,982
November.....	22,656,163	883,731	November.....	18,730,875	1,413,833
December.....	25,250,890	1,019,166	December.....	24,934,089	1,824,024
1917.			1918.		
January.....	18,391,385	707,777	January.....	15,191,341	1,040,282
February.....	13,524,000	528,994	February.....	8,256,186	600,054
March.....	10,184,685	395,945	March.....	7,214,524	509,791
April.....	11,674,604	483,330	April.....	10,012,259	757,896
Total.....	152,239,841	6,021,114	Total.....	136,805,023	9,585,077

## WHEAT FLOUR.

1916.	Barrels.		1917.	Barrels.	
May.....	24,478	\$143,212	May.....	30,768	\$347,326
June.....	41,134	206,601	June.....	7,979	106,562
July.....	25,916	140,750	July.....	13,810	163,852
August.....	19,936	131,445	August.....	17,393	208,940
September.....	14,340	96,990	September.....	63,201	710,182
October.....	23,619	171,994	October.....	56,637	682,414
November.....	40,238	342,007	November.....	34,410	394,400
December.....	49,571	440,099	December.....	32,151	374,589
1917.			1918.		
January.....	34,599	307,323	January.....	11,399	128,294
February.....	24,876	224,529	February.....	4,986	56,038
March.....	17,920	173,424	March.....	6,572	66,996
April.....	20,764	202,852	April.....	14,832	155,229
Total.....	337,381	2,582,226	Total.....	294,128	3,387,822



TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## ALL OTHER BREADSTUFFS.

	Quantity.	Value.		Quantity.	Value.
	Pounds.			Pounds.	
<b>1916</b>			<b>1917</b>		
May.....		\$14,450	May.....		\$19,259
June.....		11,917	June.....		11,242
July.....		8,050	July.....		5,084
August.....		4,088	August.....		13,318
September.....		6,196	September.....		9,904
October.....		4,778	October.....		19,262
November.....		4,590	November.....		11,199
December.....		8,621	December.....		13,576
<b>1917</b>			<b>1918</b>		
January.....		8,396	January.....		3,899
February.....		10,859	February.....		6,191
March.....		12,235	March.....		6,503
April.....		17,112	April.....		33,411
<b>Total.....</b>		<b>218,378</b>	<b>Total.....</b>		<b>152,848</b>

## COCOA AND CHOCOLATE, PREPARED OR MANUFACTURED (EXCEPT CONFECTIONERY).

	Pounds.			Pounds.	
<b>1916</b>			<b>1917</b>		
May.....		\$9,795	May.....		\$5,527
June.....		7,183	June.....		4,770
July.....		3,638	July.....		4,751
August.....		6,096	August.....		623
September.....		11,918	September.....		4,193
October.....		6,293	October.....		9,624
November.....		5,603	November.....		7,553
December.....		8,446	December.....		4,009
<b>1917</b>			<b>1918</b>		
January.....		7,688	January.....		1,675
February.....		15,378	February.....		3,655
March.....		15,889	March.....		7,469
April.....		8,591	April.....		7,601
<b>Total.....</b>		<b>106,518</b>	<b>Total.....</b>		<b>61,450</b>

## COCOA AND CHOCOLATE CONFECTIONERY.

	Pounds.			Pounds.	
<b>1916</b>			<b>1917</b>		
May.....		\$14,551	May.....		\$35,133
June.....		13,842	June.....		20,719
July.....		15,043	July.....		14,917
August.....		9,889	August.....		17,686
September.....		8,852	September.....		15,524
October.....		15,304	October.....		27,792
November.....		27,939	November.....		21,848
December.....		27,923	December.....		28,529
<b>1917</b>			<b>1918</b>		
January.....		25,198	January.....		6,629
February.....		22,184	February.....		9,817
March.....		29,361	March.....		18,416
April.....		30,101	April.....		29,217
<b>Total.....</b>		<b>240,187</b>	<b>Total.....</b>		<b>246,227</b>

## FISH, DRIED, SMOKED, OR CURED.

	Pounds.			Pounds.	
<b>1916</b>			<b>1917</b>		
May.....	822,589	\$52,294	May.....	802,437	\$79,965
June.....	334,869	19,880	June.....	217,108	20,715
July.....	510,378	38,468	July.....	959,981	91,180
August.....	536,538	39,783	August.....	920,079	78,790
September.....	478,914	33,803	September.....	1,954,423	177,150
October.....	1,128,292	85,030	October.....	878,811	88,810
November.....	705,426	56,573	November.....	157,024	13,710
December.....	393,181	25,663	December.....	473,756	42,622
<b>1917</b>			<b>1918</b>		
January.....	560,949	39,771	January.....	904,362	94,274
February.....	1,102,528	80,523	February.....	224,234	37,490
March.....	1,587,590	123,502	March.....	1,620,632	187,147
April.....	840,447	70,862	April.....	1,538,774	175,214
<b>Total.....</b>	<b>9,001,699</b>	<b>666,152</b>	<b>Total.....</b>	<b>10,661,621</b>	<b>1,087,067</b>

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## SALMON, CANNED.

	Quantity.	Value.		Quantity.	Value.
	Pounds.			Pounds.	
1916			1917		
May.....	81,924	\$5,767	May.....	33,036	\$4,891
June.....	23,582	1,620	June.....	2,158	335
July.....	92,574	6,043	July.....	2,023	305
August.....	71,074	5,436	August.....	4,281	553
September.....	48,981	3,669	September.....	910	105
October.....	34,876	2,817	October.....	1,418	260
November.....	171,614	12,394	November.....	66,358	9,975
December.....	209,703	14,763	December.....	22,381	3,098
1917			1918		
January.....	15,248	1,289	January.....	44,844	5,945
February.....	165,028	13,499	February.....	36,718	5,623
March.....	13,081	1,607	March.....	39,220	6,271
April.....	23,987	3,694	April.....	29,113	5,083
Total.....	951,672	72,588	Total.....	283,060	42,474

## ALL OTHER FISH AND FISH PRODUCTS.

	Pounds.			Pounds.	
1916			1917		
May.....		\$2,073	May.....		\$2,179
June.....		2,592	June.....		2,945
July.....		2,066	July.....		3,095
August.....		3,712	August.....		3,798
September.....		2,033	September.....		9,001
October.....		502	October.....		4,126
November.....		4,343	November.....		5,111
December.....		5,364	December.....		10,933
1917			1918		
January.....		2,066	January.....		13,699
February.....		2,586	February.....		16,565
March.....		6,591	March.....		45,279
April.....		4,114	April.....		53,747
Total.....		38,092	Total.....		170,448

## BEEF, CANNED.

	Pounds.			Pounds.	
1916.			1917.		
May.....	4,242	\$946	May.....	4,354	\$978
June.....	1,234	224	June.....	1,343	446
July.....	1,850	419	July.....	81	32
August.....	95	35	August.....	3,622	1,213
September.....	1,427	379	September.....	1,119	366
October.....	1,737	420	October.....	6,054	2,148
November.....	2,111	576	November.....	3,804	1,325
December.....	5,493	1,550	December.....	2,192	702
1917.			1918.		
January.....	3,102	901	January.....	780	288
February.....	913	183	February.....	2,564	842
March.....	795	183	March.....	3,139	1,074
April.....	6,548	1,794	April.....	11,847	3,532
Total.....	29,548	7,610	Total.....	40,899	12,946

## BEEF, PICKLED AND OTHER CURED.

	Pounds.			Pounds.	
1916.			1917.		
May.....	2,225	\$327	May.....	1,638	\$375
June.....	1,350	158	June.....	900	180
July.....	1,970	222	July.....	250	30
August.....	700	80	August.....		
September.....	650	88	September.....	550	85
October.....	450	71	October.....	1,751	294
November.....	195	26	November.....	2,792	455
December.....	1,500	213	December.....	450	85
1917.			1918.		
January.....	1,950	268	January.....	696	118
February.....			February.....	1,192	197
March.....	2,035	330	March.....	1,100	196
April.....	3,431	544	April.....	1,426	305
Total.....	16,436	2,327	Total.....	12,745	2,320

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## BACON.

	Quantity.	Value.		Quantity.	Value.
1916.	Pounds.		1917.	Pounds.	
May.....	8,664	\$1,403	May.....	21,085	\$4,606
June.....	6,958	1,192	June.....	3,743	1,181
July.....	23,009	3,278	July.....	4,178	1,211
August.....	3,641	700	August.....	2,949	957
September.....	12,787	2,418	September.....	3,955	1,250
October.....	10,456	2,066	October.....	2,528	920
November.....	31,269	4,573	November.....	4,557	1,082
December.....	13,149	2,436	December.....	46,484	10,928
1917.			1918.		
January.....	8,348	1,337	January.....	14,054	3,066
February.....	74,659	11,719	February.....	3,555	3,405
March.....	5,588	1,257	March.....	6,367	2,117
April.....	9,967	2,455	April.....	6,064	2,029
Total.....	208,495	34,634	Total.....	119,519	33,652

## HAMS AND SHOULDERS, CURED.

1916.	Pounds.		1917.	Pounds.	
May.....	308,264	\$40,667	May.....	478,287	\$101,812
June.....	288,599	41,833	June.....	225,939	49,782
July.....	167,468	23,871	July.....	45,623	11,077
August.....	263,563	40,383	August.....	77,631	18,942
September.....	475,113	72,030	September.....	265,199	56,750
October.....	229,336	35,176	October.....	435,346	94,455
November.....	334,035	52,674	November.....	125,865	30,357
December.....	394,081	64,239	December.....	244,121	63,878
1917.			1918.		
January.....	211,101	33,631	January.....	72,460	18,071
February.....	217,086	34,642	February.....	202,330	50,218
March.....	277,395	50,099	March.....	490,167	121,142
April.....	490,517	94,592	April.....	427,091	102,400
Total.....	3,856,558	583,837	Total.....	3,090,059	716,784

## LARD.

1916.	Pounds.		1917.	Pounds.	
May.....	503,509	\$71,758	May.....	612,616	\$158,149
June.....	409,739	63,177	June.....	287,936	72,233
July.....	233,701	24,320	July.....	206,189	49,406
August.....	188,150	27,318	August.....	48,874	12,250
September.....	88,401	13,042	September.....	114,093	28,692
October.....	161,862	27,308	October.....	201,916	46,928
November.....	316,460	57,635	November.....	202,363	54,610
December.....	730,670	137,491	December.....	329,261	92,338
1917.			1918.		
January.....	280,939	51,690	January.....	166,563	45,902
February.....	174,816	31,931	February.....	122,736	35,036
March.....	204,638	40,116	March.....	250,640	65,331
April.....	344,982	70,278	April.....	215,745	63,429
Total.....	3,637,867	616,054	Total.....	2,758,932	724,204

## PORK, CANNED.

1916.	Pounds.		1917.	Pounds.	
May.....	11,825	\$1,495	May.....	5,170	\$995
June.....	7,554	885	June.....	1,224	363
July.....	2,992	400	July.....	1,970	420
August.....	961	138	August.....	.....	.....
September.....	479	100	September.....	115	61
October.....	996	219	October.....	8,001	1,531
November.....	59	15	November.....	1,534	344
December.....	1,696	294	December.....	3,577	429
1917.			1918.		
January.....	1,140	212	January.....	.....	.....
February.....	200	22	February.....	41	18
March.....	245	36	March.....	.....	.....
April.....	10,306	1,531	April.....	3,163	691
Total.....	38,453	5,347	Total.....	24,795	4,852

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## PORK, PICKLED.

	Quantity.	Value.		Quantity.	Value.
	<i>Pounds.</i>			<i>Pounds.</i>	
<b>1916.</b>			<b>1917.</b>		
May.....	1,390,300	\$147,539	May.....	1,142,632	\$208,818
June.....	920,013	99,297	June.....	700,119	126,388
July.....	133,395	13,934	July.....	135,105	126,448
August.....	361,056	37,384	August.....	164,200	32,716
September.....	564,255	67,700	September.....	558,200	116,749
October.....	719,784	86,710	October.....	1,229,970	261,225
November.....	1,373,120	166,888	November.....	1,092,370	249,807
December.....	743,675	102,512	December.....	622,402	139,399
<b>1917.</b>			<b>1918.</b>		
January.....	753,602	116,316	January.....	235,006	50,997
February.....	615,200	88,680	February.....	92,386	21,087
March.....	594,689	95,753	March.....	244,700	73,372
April.....	1,070,398	163,721	April.....	424,350	101,101
Total.....	9,239,487	1,192,364	Total.....	6,642,440	1,408,107

## LARD COMPOUNDS AND OTHER SUBSTITUTES FOR LARD.

	<i>Pounds.</i>			<i>Pounds.</i>	
<b>1916.</b>			<b>1917.</b>		
May.....	699,452	\$84,056	May.....	1,058,704	\$184,409
June.....	540,380	67,194	June.....	689,381	124,909
July.....	815,708	39,412	July.....	68,952	12,023
August.....	426,900	49,393	August.....	235,560	40,210
September.....	470,215	53,760	September.....	477,146	81,708
October.....	299,008	36,332	October.....	823,250	152,780
November.....	773,065	110,349	November.....	531,414	107,499
December.....	717,966	106,459	December.....	248,439	49,912
<b>1917.</b>			<b>1918.</b>		
January.....	801,966	116,599	January.....	93,232	18,097
February.....	494,655	69,764	February.....	329,971	78,091
March.....	619,216	90,975	March.....	801,293	152,652
April.....	1,080,689	161,766	April.....	968,414	223,200
Total.....	7,199,049	985,069	Total.....	6,322,756	1,255,400

## SAUSAGE.

	<i>Pounds.</i>			<i>Pounds.</i>	
<b>1916.</b>			<b>1917.</b>		
May.....	74,123	\$15,036	May.....	214,326	\$49,576
June.....	77,851	17,587	June.....	86,354	20,570
July.....	92,259	15,558	July.....	32,955	9,145
August.....	64,473	12,446	August.....	74,815	19,688
September.....	78,822	15,501	September.....	89,911	22,787
October.....	49,976	10,213	October.....	174,683	46,199
November.....	109,218	21,900	November.....	50,308	12,658
December.....	174,259	39,178	December.....	52,548	14,818
<b>1917.</b>			<b>1918.</b>		
January.....	120,096	27,009	January.....	26,179	7,456
February.....	56,933	12,760	February.....	87,164	25,151
March.....	173,578	41,658	March.....	173,580	50,696
April.....	182,893	40,264	April.....	162,251	44,209
Total.....	1,254,481	269,100	Total.....	1,225,074	323,417

## ALL OTHER MEAT PRODUCTS, CANNED.

	<i>Pounds.</i>			<i>Pounds.</i>	
<b>1916.</b>			<b>1917.</b>		
May.....		\$9,103	May.....		\$8,023
June.....		2,312	June.....		4,835
July.....		2,759	July.....		1,226
August.....		3,087	August.....		610
September.....		2,790	September.....		3,915
October.....		1,580	October.....		11,180
November.....		3,329	November.....		8,881
December.....		4,472	December.....		15,767
<b>1917.</b>			<b>1918.</b>		
January.....		8,308	January.....		1,727
February.....		2,129	February.....		3,510
March.....		3,601	March.....		12,688
April.....		7,423	April.....		13,875
Total.....		50,873	Total.....		86,217

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## ALL OTHER MEAT PRODUCTS.

	Quantity.	Value.		Quantity.	Value.
	Pounds.			Pounds.	
1916.			1917.		
May.....		\$4,972	May.....		\$11,933
June.....		5,161	June.....		10,507
July.....		6,220	July.....		3,263
August.....		7,741	August.....		7,485
September.....		8,496	September.....		11,470
October.....		5,654	October.....		9,919
November.....		9,096	November.....		13,857
December.....		8,477	December.....		6,924
1917.			1918.		
January.....		11,868	January.....		9,158
February.....		6,768	February.....		8,663
March.....		11,483	March.....		15,738
April.....		13,287	April.....		27,410
Total.....		99,234	Total.....		135,327

## BUTTER.

	Pounds.			Pounds.	
1916.			1917.		
May.....	132,443	\$19,863	May.....	84,670	\$16,456
June.....	85,080	12,862	June.....	74,616	14,449
July.....	74,972	12,737	July.....	56,642	11,079
August.....	20,919	4,447	August.....	82,931	14,707
September.....	43,359	6,939	September.....	70,143	16,362
October.....	27,444	5,736	October.....	110,030	21,109
November.....	46,452	8,818	November.....	117,056	21,942
December.....	75,217	12,163	December.....	93,959	19,583
1917.			1918.		
January.....	65,005	12,550	January.....	56,736	11,556
February.....	70,030	13,522	February.....	78,927	18,228
March.....	147,740	21,561	March.....	98,347	23,010
April.....	152,284	25,710	April.....	61,228	14,076
Total.....	940,945	156,908	Total.....	985,285	202,532

## CHEESE.

	Pounds.			Pounds.	
1916.			1917.		
May.....	129,010	\$24,958	May.....	62,061	\$16,781
June.....	91,136	17,120	June.....	73,385	18,070
July.....	104,936	19,000	July.....	112,047	27,216
August.....	91,140	16,386	August.....	103,147	27,533
September.....	69,174	13,803	September.....	57,811	16,200
October.....	42,010	8,798	October.....	56,897	16,036
November.....	78,602	17,883	November.....	53,414	16,036
December.....	70,171	17,581	December.....	92,383	25,323
1917.			1918.		
January.....	56,412	14,173	January.....	68,421	19,610
February.....	73,885	18,736	February.....	90,505	25,283
March.....	115,827	30,691	March.....	197,513	58,244
April.....	84,101	22,448	April.....	122,813	36,842
Total.....	1,006,404	221,577	Total.....	1,090,397	303,990

## MILK CONDENSED.

	Pounds.			Pounds.	
1916.			1917.		
May.....	301,236	\$26,813	May.....	421,642	\$47,271
June.....	296,490	26,045	June.....	325,315	44,077
July.....	146,935	13,288	July.....	54,873	7,114
August.....	56,423	5,818	August.....	55,639	7,254
September.....	128,591	13,470	September.....	224,233	29,021
October.....	57,537	5,947	October.....	485,855	62,965
November.....	110,681	11,254	November.....	321,428	50,329
December.....	199,208	19,730	December.....	315,059	47,547
1917.			1918.		
January.....	145,235	15,335	January.....	199,236	32,066
February.....	209,231	22,690	February.....	188,435	30,363
March.....	365,717	40,197	March.....	437,710	72,406
April.....	372,377	44,283	April.....	448,603	71,072
Total.....	2,390,661	244,870	Total.....	3,477,928	501,485

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## COTTONSEED OIL.

	Quantity.	Value.		Quantity.	Value.
	Pounds.			Pounds.	
1916			1917		
May.....	42,862	\$6,375	May.....	54,275	\$11,266
June.....	23,492	3,356	June.....	24,245	4,150
July.....	4,595	641	July.....	25,017	4,590
August.....	1,890	268	August.....	3,263	546
September.....	4,756	638	September.....	111,494	20,277
October.....	138	17	October.....	128,225	23,266
November.....	2,564	365	November.....	25,839	4,822
December.....	4,021	586	December.....	6,758	1,569
1917			1918		
January.....	5,472	811	January.....	6,858	1,458
February.....	5,003	735	February.....	103	30
March.....	35,966	5,474	March.....	3,555	566
April.....	20,142	3,261	April.....	1,423	346
Total.....	150,891	22,527	Total.....	391,055	72,876

## ALL OTHER VEGETABLE OILS.

	Pounds.			Pounds.	
1916			1917		
May.....		\$4,384	May.....		\$1,914
June.....		5,506	June.....		778
July.....		5,440	July.....		1,278
August.....		2,619	August.....		3,732
September.....		1,867	September.....		2,206
October.....		908	October.....		2,361
November.....		1,154	November.....		1,552
December.....		2,043	December.....		663
1917			1918		
January.....		1,419	January.....		149
February.....		1,816	February.....		1,921
March.....		3,999	March.....		5,650
April.....		2,795	April.....		9,838
Total.....		33,950	Total.....		32,042

## SUGAR REFINED.

	Pounds.			Pounds.	
1916			1917		
May.....	1,028,103	\$80,993	May.....	255,831	\$30,648
June.....	90,119	5,977	June.....	835,677	65,966
July.....	485,633	38,556	July.....	1,213,089	95,775
August.....	1,390,658	106,750	August.....	648,025	52,781
September.....	2,162,769	144,716	September.....	379,473	35,951
October.....	924,727	61,694	October.....	159,375	14,045
November.....	617,192	44,373	November.....	226,806	16,509
December.....	676,297	43,046	December.....	252,063	19,460
1917			1918		
January.....	267,178	17,808	January.....		
February.....	154,530	11,008	February.....	110,362	8,363
March.....	854,990	62,023	March.....	1,697	136
April.....	706,414	53,942	April.....	1,785	146
Total.....	9,358,610	670,886	Total.....	4,084,173	329,780

## FRUIT AND NUTS (TOTAL).

	Pounds.			Pounds.	
1916			1917		
May.....		\$7,711	May.....		\$6,380
June.....		6,931	June.....		11,268
July.....		10,069	July.....		16,890
August.....		7,103	August.....		6,035
September.....		14,678	September.....		11,770
October.....		14,224	October.....		20,948
November.....		27,648	November.....		26,016
December.....		34,366	December.....		28,070
1917			1918		
January.....		11,415	January.....		28,036
February.....		18,003	February.....		29,561
March.....		5,899	March.....		19,155
April.....		4,962	April.....		20,512
Total.....		163,009	Total.....		224,631

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## BEANS AND DRIED PEAS.

	Quantity.	Value.		Quantity.	Value.
1916	<i>Bushels.</i>		1917	<i>Bushels.</i>	
May.....	21,403	\$68,526	May.....	4,350	\$26,528
June.....	11,440	38,756	June.....	176	550
July.....	5,220	22,005	July.....	622	4,444
August.....	13,658	60,822	August.....	7,789	49,929
September.....	25,107	94,067	September.....	20,331	110,595
October.....	9,937	38,484	October.....	17,975	77,902
November.....	14,520	60,465	November.....	13,724	70,323
December.....	43,694	192,898	December.....	7,704	43,314
1917			1918		
January.....	24,742	103,036	January.....	6,469	34,718
February.....	16,967	81,873	February.....	14,882	91,783
March.....	27,336	128,854	March.....	34,585	227,394
April.....	25,835	154,490	April.....	53,993	309,576
Total.....	239,859	1,044,276	Total.....	182,490	1,047,056

## ONIONS.

1916	<i>Bushels.</i>		1917	<i>Bushels.</i>	
May.....	2,811	\$4,903	May.....	475	\$1,519
June.....	237	487	June.....	1,278	2,006
July.....	240	501	July.....	519	1,008
August.....	499	804	August.....	4,212	7,094
September.....	1,565	2,447	September.....	6,895	11,530
October.....	1,654	2,739	October.....	8,480	16,078
November.....	1,953	3,728	November.....	5,406	11,423
December.....	1,185	2,620	December.....	3,708	6,629
1917			1918		
January.....	415	912	January.....	6,969	13,396
February.....	159	702	February.....	4,896	8,065
March.....	138	603	March.....	440	825
April.....	71	830	April.....	460	748
Total.....	10,927	20,776	Total.....	43,628	80,228

## POTATOES (EXCEPT SWEET POTATOES.)

1916	<i>Bushels.</i>		1917	<i>Bushels.</i>	
May.....	16,882	\$16,083	May.....	6,331	\$15,579
June.....	17,087	17,005	June.....	13,625	38,334
July.....	31,342	23,994	July.....	14,778	18,570
August.....	15,627	13,155	August.....	13,194	14,946
September.....	20,842	20,701	September.....	24,172	27,354
October.....	19,960	25,775	October.....	27,434	29,796
November.....	21,069	32,596	November.....	18,920	29,647
December.....	16,972	26,847	December.....	22,014	30,048
1917			1918		
January.....	14,357	25,426	January.....	14,945	20,235
February.....	18,333	42,447	February.....	26,992	39,391
March.....	19,285	49,723	March.....	29,537	33,980
April.....	12,696	30,316	April.....	19,286	20,435
Total.....	224,472	324,068	Total.....	231,178	318,315

TABLE I.—Comparative statistics of foodstuffs received from United States ports into Porto Rico from May, 1916, to April, 1918—Continued.

## VEGETABLES, CANNED.

	Quantity.	Value.		Quantity.	Value.
	Pounds.			Pounds.	
<b>1916.</b>			<b>1917.</b>		
May.....		\$6,613	May.....		\$3,545
June.....		4,681	June.....		3,307
July.....		5,999	July.....		2,558
August.....		3,768	August.....		5,111
September.....		7,152	September.....		3,432
October.....		4,987	October.....		5,318
November.....		13,715	November.....		3,435
December.....		14,180	December.....		5,449
<b>1917</b>			<b>1918</b>		
January.....		6,481	January.....		3,595
February.....		5,184	February.....		3,380
March.....		6,400	March.....		4,270
April.....		3,848	April.....		3,131
<b>Total.....</b>		<b>85,008</b>	<b>Total.....</b>		<b>46,541</b>

## ALL OTHER (INCLUDING PICKLES AND SAUCES).

<b>1916</b>			<b>1917</b>		
May.....		\$343	May.....		\$299
June.....		480	June.....		412
July.....		464	July.....		341
August.....		419	August.....		457
September.....		555	September.....		474
October.....		562	October.....		688
November.....		1,045	November.....		638
December.....		1,773	December.....		1,210
<b>1917</b>			<b>1918</b>		
January.....		1,373	January.....		921
February.....		966	February.....		719
March.....		632	March.....		564
April.....		349	April.....		770
<b>Total.....</b>		<b>8,881</b>	<b>Total.....</b>		<b>7,493</b>



TABLE II.—Foodstuffs imported from foreign countries into Porto Rico May, 1916, to April, 1917. Total \$1,709,992.

	May.	June.	July.	August.	Septem- ber.	October.	Novem- ber.	Decem- ber.	January.	February.	March.	April.	Total.
Salt.....	\$381	\$19		\$3		\$4		\$299	\$506	\$426	\$1,365	\$2,852	\$5,835
Coconut oil.....	10,780	24,000	\$21,943	5,582	\$3,512	135	\$224		11,814	1,103	2,500		81,563
Milk, fresh or condensed.....		164	68	54				82	74				442
Meat products, all other.....	2,822	1,176	580	1,312	1,278	158	4,304	1,573	1,242	1,766	97	5,616	21,922
Meat, prepared or preserved.....								760	207				1,067
Nuts, all other.....													
Fruits, all other.....	328	528	528	1,660	112	827	383	444	980	518	280	145	6,731
Shrimps and other shellfish, turtles.....													
Fresh fish, except shellfish.....				4									4
Fish, cured or preserved, all other.....													
Mackerel.....	4,483	420	2,378	494	3,611	1,031	13	1,159	48	2,737	360	1,887	61
Herring.....	77,541	31,146	62,279	71,773	80,485	50,889	2,351	83,366	594	86,817	13,435	93,491	21,496
Cod, haddock, lake.....	309	309	1,240		309	1,585	104,251	972	47,543		371	2,430	808,016
Cod, or caraco, crude.....													8,485
Farinaceous substances, sago, tapioca.....													27
Corn.....	468	3,064	880	1,929	111	1,397	2,162	2,004		1,335	549	175	13,515
Bread and biscuit.....	1,760	84	613	289	1,988	607	1,891	1,033	900	468		930	10,862
Almonds, not shelled.....							1,948	1,033	496			523	2,553
Almonds, shelled.....	224	285	852	112	73		485	1,963	1,324	169	128	76	4,769
Almonds, not shelled.....													568
Fruits, all other.....													
Figs, preserved.....	876	700	824	724	586	714	3,042	3,094	2,121	820	3,358	506	17,387
Fig, all other.....	2	2					83	207	607	337	378		1,494
Oranges and other dried grapes.....	1,250	1,801	50	1,129	1,123	654	1,882	611	972	1,246	793	131	11,622
Olive.....							1,288	465	5				2,081
Grapes.....								133					2,103
Pine.....	1	5	69	759	579	319	71				16		16
Dates.....													
Fish, all other.....	546	83	1,655	3,537	1,462	1,728	232	139	85	5,888	585	716	23,277
Fish, except shellfish, packed in oil, etc.....	1,005	4,563	13,145	24,405	32,403	16,634	666	2,597	2,503	2,362			145,667
Vegetables, natural state.....	1,284	3,716	1,243	3,805	1,787	824	10,190	22,108	13,890	2,362	1,841	697	17,582
Cocoa and chocolate, prepared.....							486	1,145	3,784	551			1,297
Rice, cleaned.....								130	2,206	784		108	1,561
Macaroni, vermicelli.....	708	720	1,341	725	832	794	553	574	2,206	928			11,816
Vegetables, all other.....								18					1,184
Potatoes, except sweet potatoes.....	549	1,081		275	155	34	60						2,133
Cane sugar.....													
Edible substitutes.....	18		85	330	61	441	143	433	278	211	620	417	3,063
Vegetables, prepared or preserved, all other.....	740	1,166	252	441	292	85	1,876	475	2,836	946	504	878	10,451
Pickles and sauces.....	49		134	55			40	47					61
Mushrooms and truffles.....		14	30		15				18	40		21	138
Peas, dried.....	3,675	1,737	1,181		1,139	3,386	5,160	3,369	565		3,039	18,781	42,022
Onions.....	10,191	7,349	3,021	4,629	10,084	9,226		2,900	27		92	3,857	51,406

	70	1,947	597	2,016	394	14	588	1,159	393	8,212	17,052	9,783
Bears and lentils	142	887	60	374	293	475	8,371	4,183	1,640	460	237	1,794
Sugar, candy confectionery	135											
Margarine	348	348		1,394	556	351						
Peasunt oil	348											
Olives oil edible	20,999	20,999		12,646	8,496	7,796	9,945	3,705	20,292	16,187	10,243	25,226
Cheese substitutes for	16	26		30	522	1,423	816	6	399	482	29	
Butter substitutes for	2,911	14,907	18,262	2,000	17,459	6,295	9,918	10,642	6,482	8,415	3,514	
Honey											927	
Nuts, all other					57	57			44			
Walnuts, not shelled	49				339	339		732	432			1,052
Peanuts, not shelled												1,452
Spices, all other	2,285	270	3,933	853	646		159	1,545	3,393	583	6	16,137
Bacon and hams	107		193	188		141	711	207			1,547	1,709,992

TABLE III.—Foodstuffs imported from foreign countries into Porto Rico, May, 1917, to April, 1918.

	May.	June.	July.	August.	Septem- ber.	October.	Novem- ber.	Decem- ber.	January.	Febru- ary.	March.	April.	Total.
Salt.....	\$117	\$39	\$107		\$650	\$563	\$37	\$879			\$1,006		\$4,298
Coconut oil.....								5					5
Milk, fresh and condensed.....													226
Meat products, all other.....	67					107		20	\$254				246
Meats, prepared or preserved.....	1,991	1,909		\$2,552	4,214	12,604	12,583	21,998	18,386				76,251
Beef, all other.....													
Pork, all other.....													
Butter, all other.....								1,549					1,549
Fruits, all other.....	711	1,070	686	168		87		66	251	\$5			3,091
Strawberries and other shellfish, turtles.....													
Fresh fish, except shellfish.....													
Fish, cured or preserved, all other.....													
Mackerel.....													338
Herring.....	191	52						20					20
Cod, haddock, halibut.....	73,383	37,264	1,213	23,086	20,317	3,652	2,457	6,160	8,556	5,738	3,248	86,533	37,012
Cocoa, or cacao, crude.....	73,100	494			890	94,598	112,288	98,203	115,038	88,213	33,175	73,535	769,872
Farinaceous substances, sago, tapioca, etc.....	69					741	494		3,042	773	215	155,400	163,120
Corn.....	6,694	4,408	81	273	881	14,884	11,801	11,837	2,781	1,141	3,779	12,035	70,675
Bread and biscuit.....	1,311	197		137	311	447	11,802	1,263	2,742				4,710
Flour, all other.....					27			2,642					2,669
Almonds, not shelled.....	694	432		25	465		202	1,589					3,352
Almonds, all other.....													25
Fruits, all other.....	1,920	3,969	1,531	1,100	1,100	4,935	2,191	101	47			865	148
Fruits, preserved.....							185	3,917	1,845	880			24,326
Raisins and other dried grapes.....	1,879	2,379	218	1,865	440	1,089	1,166	971	653	1,089			11,728
Olives.....						2,011	1,988	227	589			23	4,837
Grapes.....	16	188			9		2,402	574	437	59		6	3,721
Figs.....													74
Dates.....						21	40	2	11				
Fish, all other.....	2,306	16	550	2,341	990	2,450			125	37			8,795
Fish, except shellfish, packed in oil.....	1,445	265	405		325	343	2	277	562				3,894
Cocoa and chocolate, prepared, etc.....	416												
Rice, cleaned.....	378	1,527	760	686	909			216				59,911	94,527
Macaroni, vermicelli.....													4,466
Vegetables, all other.....													
Potatoes, except sweet potatoes.....				3,088		1,038	4,139		1,601	900			10,766
Cane sugar.....	569	455									3		3
Edible substitutes.....													
Vegetables, all other, natural state.....	1,991	423	2,552	7,597	7,755	16,996	10,547	25,238	19,043	1,309	5,940	495	1,024
Vegetables, preserved or pressed, all other.....	67	472	93	5		198	126	2,672	236				97,453
Pickles and sauces.....													6,033
Mushrooms and truffles.....						9		18					72
Peas, dried.....	11,550	38,064	5,199	6,289	3,705	3,453	60						66,328
Onions.....	11,523	16,675	3,313	185	3,309	3,223		2,223	338				31,968

Beans and lentils .....	13,907	3,590	925	3,363	9,868	7,438	.....	2,782	907	1,000	5,152	16,019	64,841
Sugar, candy, and confectionery .....	95	366	156	335	580	4,875	95	16,945	2,757	1,894	2	53	27,110
Molasses .....	.....	.....	.....	.....	.....	.....	.....	.....	435	.....	388	.....	523
Peanut oil .....	.....	.....	.....	.....	405	.....	.....	.....	.....	.....	.....	.....	405
Olive oil, edible .....	25,934	56,983	51,545	15,984	7,681	1,076	78	.....	.....	10	.....	.....	159,236
Cheese, and substitutes for .....	14	661	58	147	158	17	76	282	190	391	.....	.....	1,991
Honey .....	.....	.....	.....	6,075	25	.....	.....	.....	.....	.....	1,212	3,963	11,283
Nuts, all other .....	53	20	8	.....	.....	.....	43	70	.....	.....	.....	.....	11,202
Walnut, not shelled .....	.....	.....	.....	.....	.....	.....	.....	768	.....	.....	.....	.....	765
Peanut, not shelled .....	.....	39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
Bananas .....	.....	.....	.....	33	.....	.....	.....	.....	.....	.....	.....	.....	33
Spices, all other .....	5,375	3,142	1,459	590	2,330	99	.....	1,012	763	294	.....	.....	15,064
Butter, substitutes for .....	2,911	26	5,768	15,995	10,042	1,366	8,095	9,624	2,756	.....	.....	.....	56,583
Total .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,840,714

TABLE IV.—*Foodstuffs exported from Porto Rico to United States.*  
DOMESTIC ARTICLES.

	1916										1917				Total.
	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	February.	March.	April.			
Sugar.....	\$7,765,266	\$7,846,762	\$6,732,781	\$2,278,911	\$375,405	\$639,088	\$254,321	\$313,413	\$3,877,722	\$6,426,915	\$6,426,019	\$10,413,279	\$83,354,473		
Molasses.....	136,776	107,605	146,783	97,669	81,605	75,462	74,000	71,220	73,440	584	186,177	196,750	1,247,211		
Annatto.....	9,366	1,078	.....	.....	532	37	.....	.....	188	29,415	51,205	21,465	113,316		
Tallow.....	3,564	195	139	539	452	663	.....	.....	.....	.....	336	1,021	6,909		
Honey.....	11,538	5,943	4,080	8,696	22,593	7,057	3,714	.....	.....	2,151	6,446	5,020	78,233		
Copra.....	.....	.....	27,977	42,003	57,120	41,729	67,045	40,267	18,008	.....	800	700	6,140		
Coconuts.....	40,524	49,753	.....	.....	.....	.....	.....	1,205	.....	14,815	19,411	43,207	461,859		
Guava Jelly.....	2,605	2,730	27,637	55	76	48	.....	.....	.....	.....	289	.....	6,440		
Canned pineapples.....	15,834	58,860	42,630	4,424	5,407	.....	2,504	1,288	.....	18,079	3,378	840	135,106		
Pineapples.....	439,161	212,962	36,470	42,151	16,960	2,347	11,234	19,630	15,287	.....	35,171	222,177	1,071,619		
Oranges.....	14,348	2,269	1,392	600	73,180	131,002	267,796	115,066	170,886	89,421	77,214	41,695	1,024,719		
Mangoes.....	4	5	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	20		
Limes.....	.....	207	598	316	320	106	.....	180	.....	.....	.....	.....	1,547		
Lemons.....	25	2	54	376	563	145	4	.....	.....	.....	.....	25	1,384		
Grapefruit.....	13,675	916	524	1,501	24,933	78,900	135,811	130,229	180,466	127,305	144,022	99,186	937,473		
Citron.....	138	104	.....	252	736	.....	325	8	.....	.....	40	.....	1,595		
Bananas.....	5	.....	.....	.....	8	30	.....	.....	.....	.....	.....	.....	21		
Alligator pears.....	.....	20	.....	39	8	.....	.....	.....	.....	.....	.....	.....	94		
Cocoa.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Vegetables.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	.....	28		
Cucumbers.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	110	115	.....	225		
Preserved fruits.....	.....	.....	.....	.....	.....	.....	.....	110	79	.....	.....	65	254		
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58,447,674		

## FOREIGN ARTICLES.

Beans.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$6,730
Flour.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheat.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Codfish.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pease.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,080
Grand total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58,461,754

TABLE V.—Foodstuffs exported to United States, May, 1917, to April, 1918.  
DOMESTIC ARTICLES.

	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	February.	March.	April.	Total.
Alligator pears...			\$8	\$37	\$3	\$90							\$130
Mangoes...				50	140	36			\$19				8
Citron...		\$31	3,523,821	2,984,737	1,668,446	279,973	\$406	\$687,784	2,985,103	\$4,221,008	6,326,890	\$5,672,463	311
Sugar...	\$8,805,016	7,440,296											44,346,965
Molasses...	136,068	193,640	3,58,991	22,064	180,680	210,301	79,120	387,193	102,425	86,447	102,425	267,802	1,335,638
Grapefruit...	13,597	3,198	150	182	6,597	104,688	182,117	104,063	194,543		146,277	94,565	991,344
Pomegranates...					15								15
Maney...			14	13									27
Oranges...	363			4	4,246	188,698	254,873	213,688	219,999	149,661	124,308	71,881	1,217,571
Copra...	326			332	396	402	1,552	918	796	1,430	1,100		7,271
Anatto...	2,027	1,568		235		84						22,119	26,038
Canned pineapples...	7,326	71,428	17,800	2,400	18,488	4,956		15			1,029	285	123,727
Lemons...	24	1,338	348	511	453	532	883			4	50	20	3,163
Fallow...	20	1,066	212			134		1,278	3,732				6,432
Honey...	11,060	23,471	13,633	38,830	50,404	29,430	81,566	86,660	12,644	8,714	19,198	61,219	368,499
Pineapples...	24,208	29,160	13,020	32,640	37,443	64,208	85,289	94,913	83,340	56,466	78,736	53,709	648,139
Preserved fruits...	840,008	56,911	23,279	24,524	15,016	7,467	7,463	12,609	14,211	22,560	20,678	177,073	770,285
Squashes...		3,247	493	60		65					40		3,267
Nutrices (pese)											200	216	416
Nicarao...							506		10			10	20
Bananas...													508
Cocoanuts...						33			9	3	25		70
Product confections													
Guava jelly...					15	26	13	450	30	8		14	555
Total...					9	366	92	10,061					10,568
													49,704,267

## FOREIGN MERCHANDISE.

	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	February.	March.	April.	Total.
Olives...								\$13		\$450			\$450
Bananas...								102					13
Lemons...								17					102
Citron...							\$1,340						1,340
Molasses...													7,511
Peas...			\$4,050	\$3,461	\$6,147	\$375	432						14,554
Onions...			7,600		162	15,563				9,500	\$115		26,410
Olive oil...		\$70						4,500					13,340
Beans...		8,840											207
Garlic...	\$152			55									62,044
Total...													62,044
Grand total...													

TABLE VI.—*Foodstuffs exported to foreign countries, May, 1916, to April, 1917.*

DOMESTIC ARTICLES, TOTAL \$399,754.

Articles.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	Febru-ary.	March.	April.	Total.
Pickled (except salmon).											\$24		\$24
All other (dried), smoked or cured.											34	\$34	34
Cod, haddock, hake, or pollock.											303	1,039	2,372
All other breadstuffs.				\$183				\$309	\$1,530	416	2,214	490	7,773
Wheat.				870	\$10	1,987			751	8,139	24,901	8,514	42,456
Wheat flour.						150					6		6
Rye.													
Rye flour.										114		440	554
All other cereal preparations.													
Rice.	\$2,139	\$1,052	\$6,400	460	3,239	3,860	162	6,039	7,652	14,378	7,938	33,280	87,29
Oatmeal and rolled oats.													
Oats.										28	54	50	78
Cornmeal and corn flour.										72	726	937	1,699
Corn.										94			94
Bread and biscuits.		665								1,267	363	803	3,126
Brain and middlings.													
Barley.													
Barring.													
Apples, all other canned prepared fruits.						65					15	9	14
Apples, dried.					20						15	15	349
Apples, green or ripe.					100						467	47	3,907
Apples, dried.											107	6	301
All other fish and fish products.													
Salmon, all other.											10		10
Salmon, pickled.											10		27
Salmon, canned.											86	70	453
Port, pickled.													
Port, fresh.													
Port, canned.													
Neutral lard.													
Lard.													
Ham and shoulder, cured.			155										
Bacon.													

	257	1,461	4,701	2,578	3,245	2,720	3,460	18,417
Tallow, beef.....								
Oleomargarin.....								
Imitation butter.....								
Oil.....								
Beef, pickled and other.....								
Cured.....								
Beef, fresh.....								
Beef, canned.....								
Lard.....								
Honey.....								
All other nuts.....	718	1,053	641	250				
Nuts (peanuts).....			904	496	237			
All other preserved fruits.....	4	8						
Onions.....	677	96						
Sugar, refined.....	808							
Syrups.....								
Molasses.....	7,705	2,447	10,828	67	5	1,639		
Spices.....								
Butter.....	1,600							
Milk, condensed, evaporated.....								
Other meat products, canned.....								
Sausages, canned.....								
Sausages, from animal livers.....								
Sausage casings.....								
Sausage, all other.....								
Poultry, and game.....								
Meat (except canned).....								
Lard compound and other substitutes for lard.....								
Cottonseed oil.....								
Corn oil.....								
Eggs.....								
Meats.....								
Other vegetables.....								
Other shellfish.....								
Beans and peas.....								
Cocoas, crude.....								
Canned vegetables.....								
Oysters.....								
Cocoas and chocolate.....								
Confectionery.....								
Total.....								







TABLE VI.—Foodstuffs exported to foreign countries, May, 1916, to April, 1917—Continued.

## FOREIGN ARTICLES.

Articles.	May.	June.	July.	August.	Septem- ber.	October.	Novem- ber.	Decem- ber.	January.	Febr- ary.	March.	April.	Total.
Fish packed in oil.....					\$157	\$102		\$217	\$407				\$726
Butter.....					75				167				324
Peas, dried.....					1,760					\$386	\$177	\$11	552
Cocoa or cacao, crude.....				\$1,760			\$685						4,205
Condensed milk, fresh, etc.....	\$23	\$26		86					201	255		390	4,986
Pickles and sauces.....			\$58										58
Dried peas.....			18				58	48					169
Other vegetables.....		535			53	1,167			45	767		148	2,840
Olive oil.....		5,294	33				683	120		4,559			10,878
Herring.....		240						309					240
Cod, haddock, hake, etc.....		256			140	280	279	185		370			1,510
Other vegetables, natural state.....	1,005	830	205	4,953	1,439		155		690		873	3,220	12,873
Onions.....	135	2,646	217	210	113	284	403	275	172			140	4,694
Edible olive oil.....	1,201					1,544				51	313		3,109
Olives.....	1,148	668		109				38					963
Other natural vegetables.....	297												297
Macaroni, etc.....	7												7
Fresh condensed milk.....													
Figs.....												17	17
Cocoa and chocolate.....												288	288
Rice.....												878	878
Preserved fruits.....													99
Fish, except shellfish.....										72	17		1,185
Cheese.....										1,185			6
Walnuts, not shelled.....								6					12
Flour, not shelled.....								12					4
Beans and lentils.....							21	4					433
Molasses.....						412							136
Total.....						135							47,388
Grand total.....													399,764

TABLE VII.—Foodstuffs exported to foreign countries, May, 1917, to Apr., 1918.

## DOMESTIC ARTICLES.

Articles.	May.	June.	July.	August.	Septem- ber.	Octo- ber.	Novem- ber.	Decem- ber.	January.	Febru- ary.	March.	April.	Total.
Dried apples.....	\$109	\$51	\$61		\$96	\$18	\$12		\$1,351	\$1,429			\$190
Canned fish.....	104	267		\$26	31	153	11						3,471
Other salmon.....	14	431			23	23							526
Canned salmon.....	78	136	118		21	140	330						823
Other dried fish.....	57	118	396		313	594	118						884
Cod, haddock, and hake.....	59	255	315		420	594	3,774	\$8,040			\$283		1,761
Other fish.....	208	757	1,214		953	1,396	151	380		50			16,529
Confectionery.....	992	1,026	1,239		840	398	151						4,752
Cocoa and chocolate (prepared).....	9,037	7,901	1,478		237	78	1,637	433	2,369		46		21,237
Other breadstuffs.....	1,190	253	548	1,787	137	659	853		63,551	23,817	3,961		8,775
Wheat flour.....	17,885	32,283	20,069	1,583	9,382	7,653	12,276		11,019	30,344	375		191,490
Rice.....	3,890	188	3,425		12,043	6,441	1,676	67,605					137,008
Breadstuffs (prepared).....	119	83	40		15								257
Oats.....	669	94	93	39		81							976
Oatmeal.....	65	14	37	12	73	36							237
Cornmeal.....	1,259	6,874	5,597		4,260	3,421							21,411
Corn.....	350	262	1,569		9,048	135				2			12,266
Bread and biscuits.....	899	837	4,786	34	411	71	176	571	1,001				8,786
Other sausage.....	120	137	21										278
Canned sausage.....	115	6	106		104	188	6						526
Lard compound.....	255	981	378		475	1,057							3,146
Lard.....	255	981	378		475	1,057			49				3,146
Pork compound.....	117	881	184		693	609							2,433
Pork.....	72	347	796		346	977	270						2,807
Canned pork.....	2		183		14					110			309
Cured hams.....	663	2,472	714		72	278	27						4,196
Bacon.....	371	65	38				6						479
Tallow.....	1,856	2,644			1,871	1,506	2,969	66		2,494			13,540
Oleomargarine.....	81	590											697
Other preserved fruits.....	31	110	145		45	8			8				386
Canned fruits.....	253	173	341		288	288	2	31	8	8			1,149
Other fruits.....	116	264	64		1,440	637	1,440	64					2,535
Peanuts.....	11	77			2		119		42				151
Prunes.....	17	84	6				83						150
Pears, green or ripe.....	62	5					2,194	978	258	79			3,526
Green apples.....	86		14				348	882	160	108			1,548
Spices.....		78	125		39	46		15					1,300
Preserved eggs.....		92	702		285								1,409
Canned beef.....	735	169	26		104	189					330		1,223
Pickled beef.....	282		108		57		315						769

TABLE VII.—*Foodstuffs exported to foreign countries, May, 1917, to Apr., 1918—Continued.*  
DOMESTIC ARTICLES—Continued.

Articles.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	Febru-ary.	March.	April.	Total.
Other vegetables.....	3125	872	871		8725	\$1,739	\$245	\$110	\$215	\$45	\$42		\$2,889
Potatoes.....	607	1,250	838		323	306	326	451	352	22	150		4,526
Prokies and sauces.....	313	112	128		1	8	86	342		2			6,994
Onions.....	185	381	186		1	783	936		794	1,311	1,842		6,781
Beans.....	955	4,731	6,753	\$5,759	861	36	2,391	297	32	1,421	509		19,046
Refined sugar.....	847	71	1,284	14,902	3,126	21,153	102,226						42,928
Molasses.....	941		2,188		5	628							109,108
Salt.....	19	19	8				20			1,112			1,146
Condensed milk.....	1,407	830	111	176	240	119	139				24		2,477
Cheese.....	186	661	496		1,155	310	47		228				2,946
Butter.....	719	1,421	2,805		1,277	156							6,653
Other meat products.....	187	12	1,997		11	2							2,209
Canned meat products.....	386	22	154		206	18	141		273	174	3		1,170
Green fruits or ripe.....								1,225					1,728
Oleomargarine.....					22	36							83
Honey.....					9,600	8,750	53,387						71,737
Dried fruits.....					8	26	3			2			35
Fresh beef.....			21		8								83
Tomatoes, canned.....			734		24	132	6	116		111			1,103
Dried peas.....			85		1								86
Fresh pork.....		629	108			369							1,110
Pickle beef.....	479	474	232		7,758	1,586	690	104	781	33	182		12,847
Other nuts.....		54	826		2,282	202							353
Peanut.....		279					22						911
Dried peaches.....		471					77		148	75	15		911
Oranges.....		300	111	169	78	255			26	17			1,352
Canned vegetables.....													1
Yams.....		1											56
Other fish.....		6			60	10	138						1,024
Other shellfish.....		54					148			882			181
Oysters.....		10			22				8				8
..... meat products.....													6
Canned corn.....								5					5
Canned peaches.....								20	30	1			51
Total.....													798,785



TABLE VIII.—*Statement of fruit shipments from Porto Rico to continental United States, July 1, 1917, to June 30, 1918.*

PERIOD OF JULY 1, 1917, TO JANUARY 29, 1918 (NOT CONTROLLED BY PORTO RICO PRODUCERS COMMITTEE).

Port.	Grape-fruit.	Oranges.	Lemons	Pine-apples.	Total.
San Juan.....	300,310	66,902	.....	50,516	417,728
Mayaguez.....	2,056	200,146	516	92	202,810
Ponce.....	365	71,628	.....	.....	71,993
Aguadilla.....	963	90,386	.....	.....	91,349
Total.....	303,694	429,062	516	50,608	783,880

PERIOD OF JANUARY 30 TO JUNE 30, 1918 (CONTROLLED BY PORTO RICO PRODUCERS COMMITTEE).

San Juan.....	229,199	47,017	.....	247,290	523,506
Mayaguez.....	268	65,541	50	717	66,576
Ponce.....	.....	66,964	.....	.....	66,964
Aguadilla <sup>1</sup> .....	.....	.....	.....	.....	.....
Total.....	229,467	179,522	50	248,007	657,046
Grand total.....	.....	.....	.....	.....	1,440,926

<sup>1</sup> Shipped via Mayaguez after Jan. 30, 1918.*Total applications passed on by the Committee from January 30 to June 30, 1918.*

	Applica-tions.	Boxes of fruit.
Mayaguez <sup>1</sup> .....	640	409,471
San Juan.....	3,495	999,597
Ponce.....	201	153,453
Total.....	4,336	1,562,521
Total boxes of fruit shipped.....	.....	657,046

<sup>1</sup> Mayaguez and Aguadilla.

## RECAPITULATION.

Boxes shipped during fiscal year 1917-1918:

San Juan.....	941,234
Mayaguez.....	269,396
Ponce.....	138,957
Aguadilla.....	91,349
Total.....	1,440,936

TABLE IX.—Detail of fruit shipments from Porto Rico to continental United States on allotments made by Porto Rico Producers Committee (fruit section) Jan. 30 to June 30, 1918.

Date.	Ship.	Island shipment.	San Juan.			Total.	Total monthly.
			Grapefruit.	Oranges.	Pines.		
1918.							
Jan. 30	Coamo.....	12,250	9,824	7,399	3,461	32,874	32,874
Feb. 6	Brazos.....	13,677	13,207	6,144	3,182	36,210	.....
9	Caracas.....				16	16	.....
12	Anna.....	3,073				3,073	.....
13	Carolina.....	11,599	11,077	5,704	2,637	30,817	.....
20	Coamo.....	10,071	10,327	5,369	1,961	27,628	.....
27	Brazos.....	133,92	17,294	5,740	1,191	87,617	.....
		51,612	51,905	22,957	8,887	.....	135,361
Mar. 2	Helen.....	200				200	.....
6	Carolina.....	9,304	15,844	2,704	1,576	29,428	.....
9	Caracas.....		30			30	.....
13	Coamo.....	5,692	16,749	3,689	2,469	28,599	.....
16	Cornelia.....	340		1,485		1,805	.....
21	Brazos.....	11,003	20,075	1,716	4,633	37,427	.....
23	Philadelphia.....		2,934	1,019	245	4,198	.....
27	Helen.....	7,381		477		7,858	.....
27	Carolina.....	5,209	144,79	913	8,013	28,614	.....
30	Zulia.....	1,210				1,210	.....
		40,339	70,111	11,983	16,936	.....	139,369
Apr. 3	Coamo.....	6,955	8,261	1,400	10,768	27,384	.....
6	Joan Kilberg.....	305	215	305		825	.....
8	Cornelia.....	198				198	.....
10	Brazos.....	8,326	7,749	555	17,343	33,973	.....
13	Caracas.....		1,889	9	4,222	6,120	.....
13	Hugh Payne.....		7,000			7,000	.....
15	Helen.....	225	2,245		5,568	8,068	.....
17	Carolina.....	3,715	4,304	891	16,392	25,302	.....
24	Coamo.....	3,634	1,085	110	24,462	29,291	.....
27	Philadelphia.....		8,819	269	82	9,170	.....
		23,358	41,567	3,539	78,867	.....	1,473.31
May 1	Hercules.....		5,416	300	4,851	10,567	.....
1	Woudrichen.....	3,022	6,883		44	9,949	.....
1	Brazos.....		405		16,039	16,444	.....
8	Carolina.....	1,520	18		19,907	21,440	.....
11	Caracas.....		7,743		419	8,162	.....
12	Helen.....	140	15,892	497	1,931	18,460	.....
15	Coamo.....	653	294	273	24,098	25,318	.....
22	Brazos.....	369	10,428	1	21,714	32,507	.....
25	Philadelphia.....		1,500			1,500	.....
29	Carolina.....	149	8,638	127	19,657	23,571	.....
		5,853	52,212	1,198	108,660	.....	167,923
June 9	Caracas.....		245		14644	1,889	.....
9	Coamo.....	128	2,152		11,381	13,661	.....
13	Brazos.....		1,183	1	17,454	18,638	.....
		128	3,580	1	30,479	.....	341,88

Total shipped Jan. 30 to June 30, 1918, from San Juan:

Pineapples.....	Boxes.
Grapefruit.....	247,260
Oranges.....	229,190
Total island shipments.....	47,017
	133,540
Grand total.....	657,946



TABLE X.—Comparative retail prices for Continental United States and Porto Rico from July, 1917, to June, 1918.

Articles.	Unit.	July, 1917.		August, 1917.		September, 1917.		October, 1917.		November, 1917.		December, 1917.	
		United States.	Porto Rico.	United States.	Porto Rico.	United States.	Porto Rico.	United States.	Porto Rico.	United States.	Porto Rico.	United States.	Porto Rico.
Sirloin steak.....	Pound.....	\$0.327	.....	\$0.329	.....	\$0.323	.....	\$0.330	.....	\$0.317	.....	\$0.320	.....
Round steak.....	do.....	306	.....	306	.....	296	.....	309	.....	296	.....	300	.....
Rib roast.....	do.....	257	.....	255	.....	259	.....	257	.....	250	.....	253	.....
Chuck roast.....	do.....	219	.....	217	.....	218	.....	218	.....	212	.....	215	.....
Plate beef.....	do.....	165	\$0.166	172	\$0.165	163	\$0.170	165	\$0.177	163	\$0.179	164	\$0.187
Port chops.....	do.....	344	.....	336	.....	338	.....	340	.....	345	.....	338	.....
Ham.....	do.....	396	.....	395	.....	409	.....	426	.....	428	.....	435	.....
Lard.....	do.....	274	.....	293	.....	296	.....	314	.....	326	.....	333	.....
Eggs.....	Dozen.....	420	.....	460	.....	525	.....	551	.....	581	.....	634	.....
Milk.....	Quart.....	111	.....	112	.....	118	.....	127	.....	131	.....	131	.....
Bread.....	Pound.....	088	.....	091	.....	088	.....	088	.....	088	.....	083	.....
Flour.....	do.....	.....	081	.....	084	073	.....	070	.....	071	.....	067	.....
Corn meal.....	do.....	059	.....	066	.....	052	.....	060	.....	062	.....	057	.....
Rice.....	do.....	106	.....	106	.....	108	.....	111	.....	114	.....	116	.....
Potatoes.....	do.....	645	.....	645	.....	645	.....	631	.....	632	.....	656	.....
Onions.....	do.....	051	.....	064	.....	046	.....	049	.....	058	.....	031	.....
Beans, navy.....	do.....	195	.....	195	.....	112	.....	132	.....	136	.....	030	.....
Sugar.....	do.....	091	.....	091	.....	198	.....	189	.....	189	.....	188	.....
							112	097	.....	095	.....	094	.....
													118

Articles.	Unit.	January, 1918.		February, 1918.		March, 1918.		April, 1918.		May, 1918, June, 1918.	
		United States.	Porto Rico.	United States.	Porto Rico.	United States.	Porto Rico.	United States.	Porto Rico.	United States.	Porto Rico.
Sirloin steak.....	Pound.....	\$0.327	.....	\$0.334	.....	\$0.338	.....	\$0.346	.....	(*)	(*)
Round steak.....	do.....	306	.....	314	.....	318	.....	325	.....	325	.....
Rib roast.....	do.....	255	.....	263	.....	268	.....	276	.....	276	.....
Chuck roast.....	do.....	221	.....	221	.....	223	.....	226	.....	226	.....
Plate beef.....	do.....	172	\$0.180	177	\$0.187	182	\$0.191	189	\$0.195	190	\$0.197
Port chops.....	do.....	345	.....	347	.....	350	.....	356	.....	356	.....
Ham.....	do.....	449	.....	441	.....	445	.....	446	.....	445	.....
Lard.....	do.....	326	.....	351	.....	364	.....	374	.....	388	.....
Eggs.....	Dozen.....	474	.....	511	.....	532	.....	551	.....	581	.....
Milk.....	Quart.....	134	.....	134	.....	134	.....	132	.....	132	.....
Bread.....	Pound.....	083	.....	083	.....	084	.....	086	.....	108	.....

Flour.....	.066	.085	.066	.084	.066	.085	.066	.083	.085
Corn meal.....	.070	.087	.070	.089	.070	.087	.071	.088	.087
Rice <sup>1</sup> .....	.117	.098	.118	0.98	.118	.098	.121	.099	.109
Potatoes.....	.132	.053	.033	.057	.033	.053	.022	.053	.053
Onions.....	.050	.100	.049	.092	.049	.077	.033	.065	.071
Beans, navy.....	.185	.122	.181	.123	.181	.138	.180	.152	.121
Sugar <sup>2</sup> .....	.095	.119	.106	.092	.106	.088	.091	.084	.080

<sup>1</sup> Prices of meat in Porto Rico based on the best grade available. It is usually sold 7½ per cent meat and 25 per cent bone.

<sup>2</sup> Porto Rico prices are for fresh pork.

<sup>3</sup> United States prices are for a 16-ounce loaf weight of dough. Porto Rico price for 1 pound of bread.

<sup>4</sup> Porto Rico prices are for best quality.

<sup>5</sup> Porto Rico prices for sugar from July to January are for imported granulated, whilst local granulated was available from February to June.

<sup>6</sup> Figures for May and June on the mainland not yet available.

NOTE.—United States prices are those compiled by the Bureau of Labor Statistics of the United States Department of Labor for the 15th of each month. Porto Rico prices are the average for 7½ towns on the nearest corresponding date.

TABLE XI.—Average retail prices of local produce and of similar imported articles into Porto Rico from July, 1917, to June, 1918, based on reports received from the 76 towns in the island.

Articles.	Unit.	Weeks ending on—												
		July 7, 1917.	July 21, 1917.	Aug. 4, 1917.	Aug. 12, 1917.	Sept. 1, 1917.	Sept. 15, 1917.	Sept. 29, 1917.	Oct. 13, 1917.	Oct. 27, 1917.	Nov. 10, 1917.	Nov. 24, 1917.	Dec. 8, 1917.	Dec. 22, 1917.
Beans, native white.....	Pound.....	\$0.110	\$0.105	\$0.105	\$0.113	\$0.126	\$0.132	\$0.136	\$0.136	\$0.134	\$0.130	\$0.128	\$0.123	0.123
Beans, imported, white.....	do.....	.117	.118	.114	.118	.119	.133	.132	.138	.136	.136	.126	.128	.135
Beans, native red.....	do.....	.117	.114	.145	.127	.135	.138	.143	.145	.143	.14	.136	.134	.136
Beans, imported red.....	do.....	.137	.131	.137	.132	.14	.143	.146	.136	.143	.157	.140	.137	.139
Beans, native black.....	do.....	.101	.093	.094	.096	.087	.108	.105	.122	.140	.100	.105	.094	.100
Frijoles, native.....	do.....	.082	.079	.079	.080	.082	.084	.083	.092	.089	.087	.084	.081	.081
Frijoles imported.....	do.....	.099	.088	.091	.095	.088	.087	.090	.096	.100	.099	.098	.095	.096
Gandules, native.....	do.....	.074	.072	.071	.068	.079	.081	.084	.082	.089	.090	.084	.071	.076
Corn, native.....	do.....	.049	.043	.043	.044	.042	.046	.046	.046	.047	.040	.044	.042	.043
Corn meal, imported.....	do.....	.050	.047	.045	.048	.046	.046	.046	.046	.047	.040	.045	.045	.046
Corn meal, native.....	do.....	.053	.057	.058	.056	.058	.060	.060	.062	.059	.059	.057	.056	.058
Sugar, muscovado.....	do.....	.069	.062	.072	.071	.079	.080	.083	.078	.082	.080	.082	.080	.079
Sugar, centrifugal.....	do.....	.073	.078	.075	.077	.081	.077	.081	.081	.081	.080	.080	.079	.080
Sugar, washed.....	do.....	.082	.085	.085	.089	.091	.091	.097	.092	.094	.090	.092	.092	.092
Onions, native.....	do.....	.084	.087	.085	.084	.100	.094	.094	.094	.100	.090	.094	.093	.095
Onions, imported.....	do.....	.084	.089	.086	.086	.095	.099	.096	.094	.095	.089	.096	.097	.101
Potatoes, native.....	do.....	.090	.076	.087	.082	.087	.089	.086	.086	.087	.085	.086	.085	.084
Potatoes, imported.....	do.....	.090	.079	.080	.083	.088	.085	.085	.085	.085	.085	.084	.085	.083
Sweet potatoes, native.....	do.....	.082	.082	.082	.083	.084	.084	.084	.082	.083	.080	.084	.085	.086
Yams, native.....	do.....	.085	.084	.083	.085	.086	.083	.085	.085	.083	.080	.083	.081	.080
Plantains, native.....	do.....	2.30	2.10	2.43	2.55	2.44	2.60	2.55	2.45	2.49	2.45	2.45	2.35	2.45
Plantains, imported.....	100.....	544	498	512	540	551	545	555	505	455	548	520	530	536
Rice, first grade, imported.....	Pound.....	.096	.085	.080	.080	.090	.077	.073	.085	.086	.080	.092	.089	.088
Rice, second grade, imported.....	do.....	.088	.089	.087	.080	.091	.083	.094	.101	.104	.100	.097	.100	.098
Rice, third grade, imported.....	do.....	.079	.085	.078	.080	.082	.085	.085	.091	.090	.090	.093	.092	.089
Charcoal, native.....	Tin.....	.127	.124	.121	.129	.133	.134	.136	.138	.127	.130	.140	.148	.125

Articles.	Unit.	Weeks ending on —												
		Jan. 5, 1918.	Jan. 19, 1918.	Feb. 2, 1918.	Feb. 16, 1918.	Mar. 2, 1918.	Mar. 16, 1918.	Mar. 30, 1918.	Apr. 13, 1918.	Apr. 27, 1918.	May 11, 1918.	May 25, 1918.	June 8, 1918.	June 22, 1918.
Beans, native white.....	Pound	\$0.119	\$0.129	\$0.123	\$0.123	\$0.126	\$0.136	\$0.146	\$0.152	\$0.180	\$0.143	\$0.190	\$0.123	\$0.118
Beans, imported white.....	do	129	130	129	128	130	136	144	148	180	15	145	137	159
Beans, native red.....	do	134	135	127	14	141	147	155	153	156	145	150	188	119
Beans, imported red.....	do	142	139	137	141	145	147	153	159	158	156	152	147	113
Beans, native black.....	do	090	100	100	098	113	108	125	106	100	098	110	120	112
Frijoles, native.....	do	080	078	077	075	077	082	085	090	088	100	083	090	103
Frijoles, imported.....	do	098	090	089	096	096	094	094	105	114	102	110	116	109
Gandules, native.....	do	039	044	045	048	052	067	070	092	071	071	080	070	073
Corn, native.....	do	043	044	045	048	052	055	058	056	060	069	061	062	056
Corn, imported.....	do	045	045	046	048	052	054	058	056	060	061	062	060	058
Corn meal, native.....	do	056	058	056	059	061	063	064	066	066	060	061	062	058
Corn meal, imported.....	do	058	059	056	057	061	061	065	065	066	066	067	067	066
Sugar, muscovado.....	do	079	085	061	065	063	064	060	064	063	062	064	064	064
Sugar, centrifugal.....	do	090	085	079	081	076	075	075	076	073	076	074	074	060
Sugar, washed.....	do	090	088	080	080	076	075	075	076	077	068	070	071	079
Onions, native.....	do	093	116	103	092	092	097	071	085	079	075	080	077	089
Onions, imported.....	do	102	106	105	095	092	088	085	085	080	077	080	077	089
Potatoes, native.....	do	054	057	055	059	057	052	052	053	049	050	050	050	051
Potatoes, imported.....	do	054	056	056	057	055	058	053	053	049	051	050	050	049
Sweet potatoes, native.....	do	025	025	024	023	024	025	025	025	025	026	026	025	026
Sweet potatoes, imported.....	do	025	025	024	023	024	025	025	025	025	026	026	025	026
Yams, native.....	do	030	031	032	030	031	032	033	033	034	036	034	035	035
Yams, imported.....	do	030	030	030	030	030	031	031	032	033	034	032	031	034
Plantains, native.....	do	2.38	2.34	2.37	2.29	2.42	2.35	2.48	2.48	2.54	2.60	2.44	2.44	2.50
Plantains, imported.....	100													
Bananas, native.....	do	510	520	530	580	524	540	539	592	540	550	560	583	549
Rice, native.....	Pound	090	084	084	088	096	085	085	087	099	090	090	094	095
Rice, first grade, imported.....	do	100	096	097	098	100	098	100	099	100	100	107	100	109
Rice, second grade, imported.....	do	090	085	087	088	088	087	089	089	090	090	097	098	099
Rice, third grade, imported.....	do	080	080	077	075	078	077	082	079	080	080	087	084	080
Charcoal, native.....	Tin	141	145	144	143	143	147	154	149	149	148	115	145	141

## RESOLUTION No. 1.

The food commission, established by joint resolution No. 10 of the legislative assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to prohibit in Porto Rico the consignment, sale or shipment abroad of certain foodstuffs:

"Whereas the stock of certain foodstuffs in Porto Rico is gradually being reduced by reason of the very limited imports of same,

"Whereas from an investigation made in this island of the available stock of said foodstuffs it appears that the said stock will scarcely fill the requirements for two months.

"Whereas the domestic production is not sufficient to supply the shortage of imported goods, and many of these can not be obtained in this country and are absolutely necessary.

"Whereas as a consequence of the higher prices which the necessities of life command abroad, exports of same are being made to other markets, thereby not only causing a reduction of the stock in this island but also enhancing the prices, by reason of the demand and the panic that such situation is likely to cause.

"Whereas it is one of the duties of this commission to forestall by all means the grave crisis of a famine in this island: Now, therefore,

*"Be it resolved by the food commission:*

"SECTION 1. Hereafter the following commodities shall not be sold or shipped abroad, without the express authority of the food commission: Rice, beans, codfish, wheat flour, corn meal, condensed milk, hams, bacon, lard, edible oils, chick peas, onions, potatoes, tanners, yams, sweet potatoes, plantains, salmon, and fish of all kinds, meats of all kinds, soup paste, cheese, butter, red pepper, eggs, vegetables, cattle, and swine.

"SEC. 2. Any person, corporation, or company selling, consigning or shipping abroad any of the hereinbefore mentioned foodstuffs, without the express authority of the commission, shall be prosecuted and punished in accordance with the provisions of section 5 of the law.

"SEC. 3. This resolution will be in force and effect immediately after its publication.

"SAN JUAN, P. R., *May 11, 1917.*"

## RESOLUTION No. 2.

The food commission, established by joint resolution No. 10, of the Legislative Assembly, of Porto Rico, approved April 12, 1917, has adopted the following resolution to establish the maximum wholesale and retail prices in Porto Rico of rice, wheat flour, and condensed milk:

"SECTION 1. The food commission, after having duly investigated the amount of the available stock and the conditions of the market at home and abroad, hereby sets forth the maximum prices following at which rice, wheat flour, and condensed milk shall be sold in Porto Rico:

	Cents.
"Rice, extra fancy, known as first Japan, first Honduras, and special grades.....per pound..	9
"Rice, seconds or fair grades, known as second Japan, second Honduras, partly broken and in general all fair grades.....per pound..	8
"Rice, low grade Japan; second head (broken) and in general all grades known as thirds, or lower grades.....per pound..	7
"Wheat flour, fancy or first grade.....do.....	8
"Wheat flour, second grade.....do.....	7½
"Condensed milk, 'Eagle' brand or similar (15-ounce cans).....per can..	18
"Condensed milk, 'Milkmaid' brand, or similar (14½-ounce cans).....do.....	18
"Condensed milk, 'Magnolia' brand, or similar (12-ounce cans).....do.....	15
"Condensed milk, 'Magnolia' brand, or similar (14½-ounce cans).....do.....	16

"SEC. 2. Importers shall sell to retailers the above-mentioned articles at figures not exceeding the prices stated, with not less than 10 per cent discount as a margin for the gross profit that the latter may obtain on the retail sales.

"SEC. 3. The food commission shall indemnify any importer for any loss that he may experience when selling the above food commodities at the prices stated, provided he can show to the satisfaction of the commission that the average price paid for his stock of such goods or purchases undelivered at this date, exceed the figures at which importers shall sell same.

"SEC. 4. Any merchant affected by this provision, shall file, within 10 days of the publication of this resolution, a sworn specific statement showing all his stock on hand and on the way, setting forth the purchase prices, copies of the original invoices, name of the agent through whom the transaction has been closed, names of steamers carrying the goods, and in general any information and details that the commission should require to satisfy itself of the true original price of any article on which a claim of indemnity is made by the importer thus affected: *Provided*, That if the claim is not filed with the commission, with the required information, within the time specified, the right to indemnity herein provided for shall be construed to have been waived.

"SEC. 5. Any person or company required by the commission to furnish information under oath, who shall furnish same knowing it to be false, simulated, or otherwise altered, shall be prosecuted for perjury by the district attorneys of the government and punished in accordance with the provisions of the Penal Code of Porto Rico.

"SEC. 6. Any person or company failing to comply with the provisions of this resolution, shall be guilty of misdemeanor and shall be punished by a fine of not more than \$1,000 or imprisonment for not more than two months.

"SEC. 7. The commission reserves the right either to make good the difference in price on any article purchased previous to the 16th day of May, 1917, at a higher figure than that set forth for the sale of same, or to make over said article at the original cost price, plus the usual invoice charges, transportation to the store or warehouse where the article is stored and whatever reasonable profit may be fixed by the commission.

"SEC. 8. Whenever the commission shall see fit, will take charge of any stock, in the hands of any person or merchant, in whole or in part, should said person or merchant at any given time refuse to help the commission to supply any community being at any time in need of any of the articles hereinbefore mentioned; and the price to be paid by the commission in such cases shall be the retail price set forth by this resolution, less 10 per cent discount.

"SEC. 9. All purchases of any of the articles above mentioned made after the 16th day of May, 1917, shall be reported to the food commission to designate from time to time new prices for the sale of same.

"SEC. 10. This resolution shall take effect from and after the 17th day of May, 1917.

"SAN JUAN, P. R., May 15, 1917."

### RESOLUTION No. 3.

The food commission established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved on the 12th day of April, 1917, has adopted the following resolution establishing the maximum price at which fresh milk shall be retailed in Porto Rico:

"SEC. 1. The food commission, after thoroughly investigating all conditions relating to the production of fresh milk in Porto Rico, hereby establishes the following maximum prices for the sale of said product in the island of Porto Rico:

	Cents.
"For each legal quart of fresh milk sold at retail at any milk stand in the island.....	12
"For each pint (half of one legal quart) of fresh milk sold at any milk stand in the island.....	6
"For each half pint (one-fourth of one legal quart) of fresh milk sold at any milk stand in the island.....	3

"SEC. 2. Producers, cattlemen, owners of stands, or any person dealing in fresh milk of domestic production, shall not sell this article at higher prices than those set forth in this resolution.

"SEC. 3. Any person, company, or corporation handling or dealing in fresh milk of domestic production who shall violate the provisions of this resolution, shall be guilty of a misdemeanor and shall be fined not more than \$1,000 or imprisoned not more than two months.

"SEC. 4. This resolution shall take effect from and after Monday, the 21st day of May, 1917.

"SAN JUAN, P. R., May 18, 1917."

## RESOLUTION No. 4.

The food commission established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, has adopted the following resolution allowing the sale in the rural districts of Porto Rico of rice, wheat flour, and condensed milk at an advance 1 cent above the prices set forth in resolution of this commission dated the 15th of May, 1917:

"SEC. 1. After consideration by this commission of the conditions of the small stores situated in the rural districts of the island of Porto Rico the resolution dated, May 15, 1917, 'To establish the maximum wholesale and retail prices in Porto Rico for rice, wheat flour, and condensed milk' is hereby amended to the effect that merchants doing business in the rural zones of the island of Porto Rico, and at 1 kilometer at least from any village, may sell the articles enumerated in the said resolution at an advance of 1 cent above the maximum prices fixed therein.

SEC. 2. For the purpose of this resolution, the whole municipal districts of Culebra and Vieques shall be considered as rural zones.

"SEC. 3. This resolution shall take effect at once.

"SAN JUAN, P. R., May 22, 1917."

## RESOLUTION No. 5.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, after due consideration of the present conditions of the domestic and foreign markets, has adopted the following resolution to repeal the previous resolutions of this commission dated May 15 and 22, and establishing the maximum retail prices of rice in the island of Porto Rico:

"SEC. 1. The resolution of this food commission, adopted on the 15th day of May, 1917, 'To establish the maximum wholesale and retail prices in Porto Rico of rice, wheat flour, and condensed milk,' and the resolution of this commission adopted under date of the 22d of May, 1917, 'Allowing the sale in the rural districts of Porto Rico of rice, wheat flour, and condensed milk at an advance of 1 cent above the prices set forth in resolution of this commission dated the 15th of May, 1917,' are hereby repealed.

"SEC. 2. From the date of the promulgation of this resolution to the 24th day of June, 1917, the following maximum prices shall govern the sales of rice at retail in the towns and villages of San Juan, Ponce, Mayaguez, Aguadilla, Arecibo, Arroyo, and Guayama:

	Cents.
"Rice, choice, Japan, Blue Rose, or Honduras, whole.....per pound..	10
"Rice, Japan, Blue Rose, or Honduras, good grade and color, with some portion of broken.....per pound..	9
"Rice, Japan, Blue Rose, or Honduras, fair grades, partly broken.per pound..	8
"Rice, low grades and screenings.....per pound..	7

"SEC. 3. In all other towns and rural districts of this island, rice of the grades mentioned in the preceding section may be sold at an advance of 1 cent per pound above the established price.

"SEC. 4. Grades known as 'Fancy,' 'Valencia,' and other special grades do not fall within the provisions of this resolution and may be sold at conventional figures between retailer and consumer.

"SEC. 5. This resolution shall take effect immediately after promulgation and shall have no legal effect on and after the said 24th day of June, 1917."

SAN JUAN, P. R., June 7, 1917.

## RESOLUTION No. 6.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, has adopted the following resolution:

"SECTION 1. From this date all imports of rice to be made or intended to be made in Porto Rico, either by purchase already effected or to be effected, on consignment or otherwise, shall be reported in writing to the food commission within 48 hours after closing the transaction. This report, to be furnished both by the purchaser and the seller separately, shall contain the following information: Name and address of the

seller; name and address of the mill; name and address of the purchaser; the grade of the rice; brand or standard of same; price and conditions of the transaction; date of the deal and date of shipment.

"SEC. 2. The steamship companies in Porto Rico, whose vessels shall from this date bring rice from the United States or any other country shall, within 48 hours after the arrival of their steamers or other vessels, report to the food commission the name of the vessel or steamer, the number of bags of rice for each importer, its mark, place of shipment, consignee, and destination in the island of Porto Rico where it will be unloaded.

"SEC. 3. This resolution shall take effect immediately after its promulgation.

"SAN JUAN, P. R., June 21, 1917."

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#### RESOLUTION No. 7.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved on the 12th day of April, 1917, has adopted the following resolution:

"Whereas from the information gathered by the food commission it appears that with the present stock of rice now in Porto Rico and the amount now on its way here there will be enough for the requirements of the inhabitants until the end of the coming month of October, when rice of the new crop will be available; and

"Whereas the food commission now has rice in stock and also on the way here, which it is offering for sale at reasonable prices: Now, therefore,

"Be it resolved by the food commission:

"1. To publicly recommend to the importers to exercise all due caution in future purchases of rice, with the object of providing against an undue and excessive accumulation of the article, which would entail unnecessary losses.

"2. To publicly offer for sale the rice purchased by this commission, now on hand and also that on the way here at reasonable prices.

"3. To invite the cooperation of the merchants in general in order to overcome the present situation, and

"4. To repeal, as is hereby repealed, Resolution No. 6 of this food commission, under date of the 21st day of June, 1917, providing for information to be furnished in connection with purchasing, selling, and unloading of rice in the island of Porto Rico.

"SAN JUAN, P. R., June 29, 1917."

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#### RESOLUTION No. 8.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved the 12th day of April, has adopted the following resolution:

"SECTION 1. Resolution No. 3 of this food commission, 'Establishing the maximum price at which fresh milk shall be retailed in Porto Rico,' promulgated under date of the 18th of May, 1917, is hereby repealed as regards the municipality of San Juan, being hereby confirmed in all its parts and remaining in full force and effect for all other towns of the island of Porto Rico.

"SEC. 2. This resolution shall take effect from the date of its promulgation.

"SAN JUAN, P. R., August 21, 1917."

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#### RESOLUTION No. 9.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, has adopted the following resolution to repeal resolutions Nos. 3 and 8, dated, respectively, May 18, 1917, and August 21, 1917, referring to the sale of domestic production of fresh milk and establishing new maximum prices for the sale of fresh milk in the Island of Porto Rico:

"SECTION 1. Resolutions Nos. 3 and 8, promulgated by this food commission on the 18th day of May, 1917, and on the 21st day of August, 1917, respectively, and relating to the price for the sale of fresh milk of domestic production, are hereby repealed.

"SEC. 2. Fresh milk of domestic production shall not be sold hereafter at more than 16 cents per legal quart in the cities, wards, and suburbs of the municipalities of San Juan and Caguas; nor at more than 15 cents per legal quart in the municipalities of



Rio Piedras and Bayamon, including the village of Catano; nor at more than 14 cents in the municipality of Vieques; nor at more than 12 cents per legal quart in all other municipalities of this island.

"SEC. 3. The above prices shall apply to any fresh milk sold at any cattle ranch, milk stand, or any place fit as such, including 'coffee houses' and cafés, whenever the product is not actually consumed therein and no owner of a cattle, ranch, dairy, milk-stand, 'coffee house' or person dealing in fresh milk, shall charge any additional or extra price for transportation or delivery of milk to residences of customers. It shall be considered unlawful to charge any additional amount for any reason whatsoever on the prices hereinbefore stipulated for the sale of fresh milk.

SEC. 4. Pasteurized milk or otherwise specially prepared by scientific process requiring the actual use of machinery, etc., shall not be affected by the provisions of this resolution.

"SEC. 5. Any person, company, or corporation handling or dealing in fresh milk of domestic production, who shall violate the provisions of this resolution, shall be guilty of a misdemeanor and upon conviction thereof, shall be fined not more than one thousand (\$1,000) dollars or imprisoned not more than two months.

"SEC. 6. Any resolution or part thereof in conflict with this resolution is hereby repealed.

"SEC. 7. This resolution shall take effect on and from the 1st day in September in the year 1917.

"SAN JUAN, P. R., August 29, 1917."

#### RESOLUTION No. 10.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, has adopted the following resolution:

"SECTION 1. All bread of the usual kinds, generally known as 'water bread,' 'fresh bread,' or 'kneaded bread,' manufactured in Porto Rico, shall be sold at any bakery, at wholesale or retail, at no more than 10 cents per pound, in any municipality of this island, having railroad connection of a public nature, or wherever by reason of favorable conditions it is usual to make transportation of supplies for the market by sea.

"SEC. 2. In towns not having railroad connections of a public nature extending from the main track, or wherever it is not feasible or customary to use the sea for loading or unloading of supplies shipped by steamers or schooners, bread generally known as 'water bread,' 'fresh bread,' or 'kneaded bread' shall be sold at a price not to exceed 11 cents per pound, whenever the sale is made at the bakery.

"SEC. 3. It shall be unlawful for any owner, agent, or person in charge of a bakery to refuse selling bread therein to any person applying for it and tendering payment thereof at the respective prices per pound mentioned in the above preceding sections.

"SEC. 4. Bread of any of the above-mentioned classes shall not be retailed at the stores, groceries, or inns of any municipality of this island, nor delivered at residences or sold on the streets by vendors or bakery agents at more than 12 cents per pound.

"SEC. 5. Bakers are hereby released of the obligation of making allowances to merchants or vendors, at the current price, for bread of the previous day, known as 'stale bread.'

"SEC. 6. Members of the insular police force and municipal authorities shall enforce this resolution, not only as regards the price charged for bread, but also in regard to the weight of same which shall conform to the regulations of the bureau of weights and measures of the Government of Porto Rico.

"SEC. 7. Every infraction of this resolution shall be prosecuted and any offender shall, upon conviction, be fined not more than \$1,000 or imprisoned not more than two months.

"SEC. 8. This resolution shall take effect from and after Monday, the 15th day of October, 1917.

"SAN JUAN, P. R., October 9, 1917."

#### RESOLUTION No. 11.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, has adopted the following resolution to establish the maximum price for the sale of meat in the municipality of San Juan:

"SECTION 1. Fresh meat offered for sale in the city of San Juan and suburbs or wards thereof shall not be sold at more than 42 cents per kilogram at retail.

"SEC. 2. The practice of classifying meat for sale, as has been done heretofore in San Juan, is hereby abolished in the interest of the people, and all meat, also known as 'beef,' sold hereafter in this municipality shall be in the proportion of three-quarters of a pound of boneless meat to every quarter of a pound of bones.

"SEC. 3. Officers of the bureau of weight and measures, municipal authorities, and members of the insular police force, as well as citizens in general, are urged to see that this resolution is enforced, not only as regards the sale price of meat, but also in regard to the weight and proportions of same as above stated.

"SEC. 4. This resolution shall take effect from and after Saturday, the 17th day of November, 1917.

"SAN JUAN, P. R., November 14, 1917."

#### RESOLUTION No. 12.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to establish the maximum price for the sale of codfish (current quality), pollock, and haddock in Porto Rico:

"SECTION 1. Codfish of current class, haddock, and pollock imported or to be imported into Porto Rico shall not be sold at retail at a price exceeding 11 cents per pound in towns having railroad connections of a public nature or where by reason of favorable conditions transportation of supplies for the market is usually made by sea.

"SEC. 2. In towns where there is no railroad connection for public service derived from the main track, or wherever it is not feasible or customary to load or unload supplies by steamers or schooners, codfish of current quality, haddock, and pollock shall be sold at retail at a price not to exceed 12 cents per pound.

"SEC. 3. Every infraction of this resolution shall be punished by a fine of not more than \$1,000 or by imprisonment for not more than two months.

"SEC. 4. This resolution shall take effect from and after Friday, the 23d of November, 1917.

"SAN JUAN, P. R., November 21, 1917."

#### RESOLUTION No. 13.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to regulate the sale of fish in the municipality of San Juan:

"SECTION 1. All fresh or refrigerated fish sold in the city of San Juan and its suburbs shall sell from this date at a maximum price of 15 cents per pound.

"SEC. 2. Violations of this resolution shall be punished in accordance with the law.

"SEC. 3. This resolution shall take effect and shall be in force immediately

"SAN JUAN, P. R., December 1, 1917."

#### RESOLUTION No. 14.

The food commission established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution, to restrict the slaughtering of female cattle in Porto Rico:

"Whereas the scarcity of cattle in this island is not now a menace but a serious economical problem that must be met by adequate measures under the impending circumstances; and

"Whereas the import of cattle from foreign countries is an apparent failure, not only because of the requirements of Federal legislation, which we are unable to change, but because the scarcity of cattle appears in itself to be general everywhere; and

"Whereas if it is desirable that the production of meat and of the now scant quantity of milk in this island be encouraged to any degree, the slaughtering of female cattle should by reason of the present scarcity be restricted; and

"Whereas any steps taken in this direction, even if affecting some individuals, should be welcome and observed because of the benefit to be derived therefrom, especially so when by reason of the war and the uncertainty of its duration, the scarcity of food, especially of meat and milk, has become a universal question: Now, therefore,

*"Be it resolved by the food commission of Porto Rico:*

"SECTION 1. The slaughtering of female cattle in every municipality of Porto Rico, is prohibited in any proportion other than one female to every five male heads.

"SEC. 2. The municipal authorities and the local health officers shall see to it that this resolution is enforced.

"SEC. 3. Any person, corporation, company or association slaughtering or permitting to slaughter cattle in any proportion other than above stated, to wit: one female to every five male heads, in every municipality, shall be prosecuted in accordance with the law.

"SEC. 4. This resolution shall take effect from Monday, the 3d day in December, 1917, on which date the slaughtering of male cattle shall be made as herein ordered.

"SAN JUAN, P. R., December 1, 1917.

#### RESOLUTION No. 15.

The food commission established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution, designating Tuesdays instead of Fridays as meatless days in Porto Rico:

"Whereas by reason of the scarcity of cattle this food commission has recommended that one day of each week be a meatless day, and this practice has been generally observed on Fridays in most of the towns of this island; and

"Whereas it is deemed convenient that in all territories belonging to the United States uniformity shall prevail in all decisions relating to the conservation of food; and

"Whereas the changing of the 'meatless day' shall not affect anyone in particular in matters of business or habits; and

"Whereas 'meatless day' as properly known in the United States is observed on Tuesdays: Now, therefore,

*"Be it resolved by the food commission:*

"SECTION 1. That every Tuesday shall be a meatless day all over the island of Porto Rico.

"SEC. 2. That no meat of any kind, except fowl, shall be sold in Porto Rico on Tuesdays, nor served on said days at any hotel, restaurant, boarding place, club, or other public place whatever.

"SEC. 3. The municipal authorities shall see to it that this resolution is enforced, especially in preventing the slaughtering of cattle on Monday afternoons for sale the following day.

"SEC. 4. Any person, company, corporation or association, selling or permitting to sell or serve publicly on Tuesdays meat of any breed of cattle in any form shall be prosecuted and punished according to law.

"SEC. 5. This resolution shall go into effect from and after Tuesday, the 11th day in December, 1917.

"SAN JUAN, P. R., December 3, 1917."

#### RESOLUTION No. 16.

The food commission established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to establish a "wheatless day":

"Whereas according to official information received from the United States Food Administration the shortage of wheat is an impending menace that should be met by all available means; and

"Whereas the total surplus of the wheat crop of 1917 has been already exported to allied nations for war needs; and

"Whereas the allied nations rely for their supply of wheat flour on what the American people can save by different means; and

"Whereas the principle followed for the saving of food in the United States is to abstain one day in each week from the use of bread or any food product in the manu-

facture of which wheat flour is used; and Wednesday has been the day thus set and known as 'wheatless day'; and

"Whereas wheat flour for the manufacture of bread may be substituted to advantage by the use of corn meal, which is plentiful in Porto Rico and the United States proper, and the export of which to allied countries is impracticable because it deteriorates in transit; and

"Whereas restrictive measures of this nature should be adopted that will be applicable to persons whose spirit of cooperation is not willingly contributed to the service of our country at war: Now, therefore,

*"Be it resolved by the food commission:*

"SECTION 1. Every Wednesday shall be a 'wheatless day' in the island of Porto Rico.

"SEC. 2. No bread, crackers, sweet or other food products in the manufacture of which wheat flour is used shall be offered for sale or served on Wednesday at any hotel, boarding place, restaurant, or other public place.

"SEC. 3. All violations of this resolution shall be prosecuted and punished according to law.

"SEC. 4. This resolution shall take effect from and after Wednesday, the 12th day of December, 1917, which day, likewise all successive Wednesdays, while this resolution is in force, shall be known, as wheatless days.

"SAN JUAN, P. R., December 8, 1917."

#### RESOLUTION No. 17.

The food commission, established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to establish the maximum prices for the sale of rice:

"SECTION 1. For the purpose of the sale of rice at retail in any town, village, or rural district in the island of Porto Rico the following maximum prices are hereby established:

	Cents.
"For 1 pound of rice with 'absolutely whole' grains .....	10
"For 1 pound of rice with grains mixed in a proportion of not less than 50 per cent whole .....	9
"For 1 pound of rice mixed in a smaller proportion of whole grains than above stated, or broken rice .....	8

"SEC. 2. The quality or standard of the rice shall be determined by agreement between the seller and the purchaser; for the purpose of this resolution, rice, as described in section 1, shall be considered as first, second, and third quality, respectively.

"SEC. 3. Any person, firm, corporation, or association selling rice at higher figures than those respectively provided for in section 1 shall be deemed guilty of a violation of this resolution and shall be fined not more than \$1,000 or imprisonment not more than two months.

"SEC. 4. This resolution shall take effect immediately after being promulgated.

"SAN JUAN, P. R., December 10, 1917."

#### RESOLUTION No. 18.

The food commission, established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to repeal resolution No. 12 of November 21, 1917:

"SECTION 1. Resolution No. 12, adopted November 21, 1917, 'to establish the maximum prices for the sale of codfish, haddock, and pollock in Porto Rico,' is hereby repealed.

"SEC. 2. This resolution shall have legal effect and shall become effective immediately after its promulgation.

"SAN JUAN, P. R., December 12, 1917."

## RESOLUTION No. 19.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to establish the maximum price for the sale at retail of domestic cheese, known as "del pais," "de prensa," "de puño," "de hojas," etc.:

"Whereas the shortage of fresh milk is such that radical measures are advisable in order to increase and encourage its production; and

"Whereas after a thorough investigation it appears that there is, in some localities, an overproduction of fresh milk which, with the existing ways of communication and relative transportation facilities, could be properly shipped to other localities where there is a shortage of it, but is instead turned out into cheese, because of the high price now prevailing for this product, which practice is detrimental to children and sick people for whose diet milk is indispensable; and

"Whereas in determining the maximum price for the sale of cheese of domestic production it is proper to take into consideration the value of milk accidentally curdled and incidental expenses, or the value of milk the transportation of which to market is too costly or impossible, while the value of milk purposely curdled and which could otherwise have been brought to market, under favorable conditions, should not be considered: Now, therefore,

*Be it resolved:*

"SECTION 1. All cheese made in Porto Rico, and known as 'del pais,' 'de prensa,' 'de puño,' 'de hojas,' etc., and offered for sale therein, shall be sold at retail, by actual weight, at a price not to exceed 40 cents per pound.

"SEC. 2. Any natural or juridical person offering for sale, or actually selling any kind of cheese made in Porto Rico, at a price in excess of the one hereby established, shall be prosecuted and punished in accordance with the law.

"SEC. 3. This resolution shall have legal effect and shall be in force from and after Monday, the 24th of December, 1917.

"SAN JUAN, P. R., December 12, 1917."

## RESOLUTION No. 20.

The food commission, created by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has passed the following resolution fixing the maximum price for the sale of sugar at retail in Porto Rico:

"SECTION 1. Any sugar of the classes hereinafter described or similar thereto, which may be sold in Porto Rico, at retail, in any public establishment while this resolution is in force, shall be sold at the following maximum prices:

	Cents per pound.
"Class A.—Molasses sugar turbinéd or muscavado brown.....	6
"Class B.—Centrifugal sugar known as raw crystals of usual shipping grades and yellow muscavados.....	7
"Class C.—Centrifugal washed known as plantation washed sugars.....	8
"Class D.—Centrifugal white washed, sulphured, granulated, or refined sugars..	9
"Class E.—Lump sugar.....	10

"SEC. 2. Any person, natural or juridical, who shall offer for sale or sell at retail in any establishment in the island of Porto Rico any sugar of the classes described under section 1, at higher prices than those therein specified for each particular class, shall be dealt with and punished according to law.

"SEC. 3. This resolution shall have legal effect and be enforced on and after the 15th of January, 1918.

"SAN JUAN, P. R., January 4, 1918."

## RESOLUTION No. 21.

The food commission created by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has passed the following resolution repealing resolution No. 14, passed by the food commission on December 1, 1917, regulating the slaughtering of female cattle in Porto Rico:

"SECTION 1. Resolution No. 14 of the food commission passed on December 1, 1917, 'restricting the slaughtering of female cattle in Porto Rico' is hereby repealed.

"SEC. 2. The slaughtering of female cattle in Porto Rico, for the supply of meat to the public, shall only be allowed after having duly shown to the satisfaction of the mayor of the municipality or his duly authorized representative, and of the local health officer or sanitary inspector, that the female to be slaughtered is unfit for breeding purposes.

"SEC. 3. The unfitness for breeding purposes above referred to, may be verified by a certificate issued by a qualified veterinarian, and in lieu thereof, by an examination or investigation made in each particular case by the mayor of the municipality or his duly authorized representative, jointly with the inspector or sanitary officer, the two latter officials being authorized either to allow or prevent the slaughtering of the female cattle.

"SEC. 4. The municipal authorities and the local sanitary officers shall enforce this resolution.

"SEC. 5. Any person, firm, company, or corporation or association who shall slaughter or permit the slaughtering of any female cattle in conditions other than those hereinabove set forth, shall be prosecuted, and upon conviction thereof, shall be punished by a fine of not more than \$1,000 or imprisonment for not more than two months, according to law.

"SEC. 6. This resolution shall have legal effect and become in force from Monday, January 7, 1918.

"SAN JUAN, P. R., January 4, 1918."

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#### RESOLUTION No. 22.

The food commission, established by joint resolution No. 10, approved by the Legislative Assembly of Porto Rico, April 12, 1917, has adopted the following resolution to prohibit the sale at hotels, cafés, restaurants, clubs, and other public places in Porto Rico, of ice creams, coffee with milk, milk shake, custards, etc., when prepared with fresh milk:

"Whereas the shortage of fresh milk in this island is such, specially during the winter months, that it becomes necessary to take coercive measures for the saving of this product, that shall remain in force and effect during the prevailing circumstances; and

"Whereas from the investigations made by the food commission it has been learned that a large proportion of the milk produced in this country is purchased by owners or administrators of hotels, cafés, restaurants, clubs, and other public places, generally at high figures, and used for the making and preparation of custards, ice creams, coffee with milk, milk shakes, etc.; and

"Whereas such confections and drinks may well be termed as luxuries mainly indulged in by persons of independent means, while milk instead of being so used, should be destined for public milk stands with a view to increasing the quantity offered for sale to the public in general; Now, therefore,

*Be it resolved by the food commission:*

"SECTION 1. No confection or drink prepared with fresh milk of domestic production, such as ice creams, coffee with milk, custards, milk shakes, etc., shall be sold or served at any hotel, café, restaurant, club, public place, or street in the island of Porto Rico within city limits and where fresh milk is sold, at retail, at more than 12 cents per legal quart.

"SEC. 2. Nothing contained in the preceding section shall be construed to prevent the use of condensed milk, evaporated milk or any other kind of milk prepared outside of Porto Rico, in the confection or preparation of sweets, drinks, or refreshments sold or served at said public places.

"SEC. 3. Any person, company, corporation, or association serving or causing to be served any refreshment, drink, or confection prepared with fresh milk of domestic production, at any public place situated within city limits where the price of milk exceeds 12 cents per legal quart, and any person, natural or juridical, knowingly selling or causing to be sold fresh milk, of domestic production at any café, hotel, restaurant, club, casino, or other public place, shall be reported and upon conviction shall be punished by a fine not exceeding \$1,000 or imprisonment not exceeding two months.

"SEC. 4. This resolution shall go into effect from and after Wednesday the 23d of January, 1918.

"SAN JUAN, P. R., January 16, 1918."

## RESOLUTION No. 23.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to amend resolution No. 19, dated December 12, 1917, "to establish the maximum price for the sale at retail of domestic cheese, known as 'del país,' 'de prensa,' 'de puño,' 'de hojas,' etc.:

"SECTION 1. Sections 1 and 3 of the resolution of this food commission referred to in the above title, are hereby amended to read as follows: 'Section 1. All cheese made in Porto Rico and known as "de la tierra," "del país," "de puño," "de prensa," "de hojas," etc., offered for sale in Porto Rico, shall be sold by actual weight, at retail, at a price not to exceed 25 cents per pound.'

"Sec. 2. This resolution shall be in force and effect from and after Monday the 21st of January, 1918.

"SAN JUAN, P. R., January 17, 1918."

## RESOLUTION No. 24.

The food commission, established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to amend resolution No. 10:

"Whereas the regulations of the United States Food Administration governing licensed bakers provide that bread shall be manufactured only in rolls of from 1 to 3 ounces and loaves of 1 pound or multiples thereof; and

"Whereas in compliance with said rules most of the bakers in Porto Rico are manufacturing bread in 1-pound loaves, which have to be arbitrarily divided for sale in small portions, thereby hampering the sale of bread at retail; and

"Whereas the manufacture of 1-pound loaves, instead of rolls of from 1 to 3 ounces, implies the saving of labor to bakers; and

"Whereas it is the desire of the food commission of Porto Rico to harmonize the decisions of the United States Food Administration with the customs and conditions of this country; Now, therefore,

*Be it resolved by the food commission:*

"SECTION 1. Section 1 of resolution No. 10, adopted by this food commission October 15, 1917, is hereby amended so that the price for bread manufactured in loaves weighing 1 pound or more is fixed at 9 cents for each pound and the price of bread manufactured in rolls of from 1 to 3 ounces, whether multiples or not, is fixed at 10 cents for each pound.

(NOTE.—The above prices will apply to sales made at the bakeries in towns having harbor facilities or public railroad connection derived from the main track.)

"SEC. 2. Section 2 of the said resolution is amended so that the price of bread manufactured in loaves weighing 1 pound or more is fixed at 10 cents for each pound and the price of bread manufactured in rolls of from 1 to 3 ounces, whether multiple or not, is fixed at 11 cents for each pound.

(NOTE.—The above prices will apply to sales made at the bakeries in towns having no public railroad connection derived from the main track or harbor facilities.)

"SEC. 3. Section 4 of the said resolution No. 10 is hereby amended so that the price of bread manufactured in loaves weighing 1 pound or more is fixed at 11 cents and the price for bread manufactured in rolls of from 1 to 3 ounces, whether multiple or not, shall not exceed 12 cents for each pound.

(NOTE.—This section applies to bread sold outside of the bakeries all over the island. Loaves weighing 1 pound are worth 11 cents and small rolls shall be sold at the rate of 12 cents for each pound.)

"SEC. 4. All other provisions of resolution No. 10 of this food commission, hereinbefore referred to, not in conflict with the present resolution, remain in full force and effect.

"SEC. 5. This resolution shall go into effect from and after Wednesday, the 23d day of January, 1918.

"SAN JUAN, P. R., January 17, 1918."

## RESOLUTION No. 25.

The food commission, established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to amend resolution No. 22 of the food commission "to prohibit the sale at hotels, cafés, clubs, restaurants, and other public places in Porto Rico, of ice cream, coffee with milk, milk shake, custards, etc., when prepared with fresh milk":

"SECTION 1. Section 1 of resolution No. 22 of the food commission adopted January 16, 1918, is hereby amended to extend to all towns where fresh milk is retailed at 12 cents or more per legal quart, the restriction of selling or serving at hotels, cafés, restaurants, casinos, clubs, or other public places or streets within city limits in the Island of Porto Rico, confections or drinks prepared with fresh milk of domestic production, such as ice creams, coffee with milk, custards, milk shake, etc.

"SEC. 2. All other provisions of the said resolution No. 22 are hereby continued in effect, subject to the foregoing amendment.

"SEC. 3. This resolution shall become effective at once.

"SAN JUAN, P. R., January 30, 1918."

## RESOLUTION No. 26.

The food commission, established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to repeal resolution No. 11 "to establish the maximum price for the sale of meat in the municipality of San Juan":

"Whereas as a result of the unwarranted advance in price of cattle on the hoof (which is now the object of investigation), our attention has been called to the impossibility of effecting further sales of meat in the municipality of San Juan at the rate of 42 cents per kilogram, as established by the above-entitled resolution; and

"Whereas the purpose of the food commission in establishing the price for the sale of fresh meat in the municipality of San Juan has been to take a transitoral measure, to be repealed as soon as suspended by an ordinance of the municipality of San Juan providing for the sale of fresh meats by means of public bids, in accordance with the law; and

"Whereas to provide against the possibility of a meat famine in the municipality of San Juan, the mayor of the city has requested the food commission to repeal the above-entitled resolution while the said ordinance is finally approved and put into effect; and

"Whereas after the municipal ordinance to provide for the sale of meat by public bids becomes effective which will shortly take place, the auction board shall be empowered to regulate the sale of fresh meat in accordance with the law; Now, therefore, *Be it resolved by the food commission of Porto Rico:*

"SECTION 1. Resolution No. 11, adopted by this food commission under date of November 14, 1917, entitled 'Resolution to establish the maximum price for the sale of meat in the municipality of San Juan,' is hereby repealed.

"SEC. 2. This resolution shall become effective at once.

"SAN JUAN, P. R., February 6, 1918."

## RESOLUTION No. 27.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to regulate the price for fresh milk in the several municipalities of this island:

"Whereas by reason of circumstantial events it has not been possible to maintain a uniform price for the sale of fresh milk in all towns of this island; and

"Whereas the food commission has hitherto intended to establish prices for the sale of fresh milk, in conformity with the recommendations of the several municipal councils and mayors of the island, after taking into consideration the local conditions in each town; and

"Whereas suggestions as to the price at which fresh milk should be sold have been now received from most of the towns of this island: Now, therefore,

*"Be it resolved by the food commission:*

"SECTION 1. Until otherwise provided the maximum price for the sale of fresh milk shall be 6 cents per legal quart at the town of Culebra;



"Until otherwise provided the maximum price for the sale of fresh milk shall be 8 cents per legal quart at the towns of Aguada, Barros, Moca, Morovis, Pefuelas, Salinas, and San Sebastian;

"Until otherwise provided the maximum price for the sale of fresh milk shall be 9 cents per legal quart at the town of Quebradillas;

"Until otherwise provided the maximum price for the sale of fresh milk shall be 10 cents per legal quart at the towns of Adjuntas, Coamo, Dorado, Guayanilla, Hatillo, Jayuya, Juana Diaz, Lares, Las Marias, Las Piedras, Maunabo, Rio Grande, Utuado, Vega Alta, Vieques, Villalba, Yabucoa, and Yauco;

"Until otherwise provided the maximum price for the sale of fresh milk shall be 11 cents per legal quart at the towns of Aguadilla, Cabo Rojo, and Camuy;

"Until otherwise provided the maximum price for the sale of fresh milk shall be 12 cents per legal quart at the towns of Aibonito, Añasco, Arecibo, Arroyo, Barceloneta, Barranquitas, Carolina, Ciales, Cidra, Comerio, Corozal, Fajardo, Guanica, Guayama, Guaynabo, Hormigueros, Humacao, Isabela, Lajas, Loiza, Luquillo, Maricao, Mayaguez, Naguabo, Naranjito, Patillas, Rincon, Sabana Grande, San German, Santa Isabel, Toa Alta, Toa Baja, Trujillo Alto, and Vega Baja;

"Until otherwise provided the maximum price for the sale of fresh milk shall be 14 cents per legal quart at the towns of Aguas Buenas, Ceiba, Gurabo, Juncos, and Manati;

"Until otherwise provided the maximum price for the sale of fresh milk shall be 15 cents per legal quart at the towns of Bayamon, Caguas, Cayey, and Ponce; and

"Until otherwise provided the maximum price for the sale of fresh milk shall be 16 cents per legal quart at the towns of Rio Piedras and San Juan.

"SEC. 2. Charging for fresh milk prices other than those respectively provided for in section 1 of this resolution is hereby forbidden, and any person, natural or juridical, who shall violate this provision shall be prosecuted, and upon conviction shall be fined not more than \$1,000 or imprisoned not more than two months.

"SEC. 3. This resolution shall become effective immediately after promulgation.

"SAN JUAN, P. R., February 6, 1918."

#### RESOLUTION No. 28.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April, 12, 1917, has adopted the following resolution designating Monday of each week as a "wheatless day":

"SECTION 1. In addition to the setting aside of Wednesday as a 'wheatless day' by resolution No. 16 of this food commission, every Monday of each week is hereby designated as a 'wheatless day' in the island of Porto Rico.

"SEC. 2. Offering for sale or serving bread, crackers, confections, or other articles prepared with wheat flour at any hotel, restaurant, boarding place, or other public place is hereby prohibited.

"SEC. 3. Any violation of this resolution shall be prosecuted and punished by fine not exceeding \$1,000 or imprisonment not exceeding two months.

"SEC. 4. This resolution shall be in force and effect from and after the 11th day in February, 1918, which day, likewise all Mondays and Wednesdays following, shall be known as 'wheatless days' while this resolution is in force.

"SAN JUAN, P. R., February 6, 1918."

#### RESOLUTION No. 29.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution:

"SECTION 1. The retail price for sugars sold hereafter in the island of Porto Rico shall not exceed the following:

	Cents per pound.
"Class A.—Molasses sugar (second centrifugal) turbinéd or dark muscavado....	6
"Class B.—First centrifugal sugar, known as raw crystals, of usual shipping grade and light muscavados.....	7
"Class C.—Centrifugal sugar, washed (former authorized price 8 cents).....	7½
"Class D.—Centrifugal sugar, white or washed, sulphured, granulated, or refined (former authorized price 9 cents).....	8
"Class E.—Lump sugar.....	10

"SEC. 2.—Any person, natural or juridical, offering for sale or selling at retail, in any place in the island of Porto Rico, any grade of sugar at a price in excess of those prescribed for each grade, respectively, in section 1 shall be prosecuted and punished in accordance with the law.

"SEC. 3. Resolution No. 20, adopted by this food commission on the 4th day of January, is hereby repealed.

"SEC. 4. This resolution shall be effective on the 25th day of February, 1918.

"SAN JUAN, P. R., *February 18, 1918.*"

#### RESOLUTION No. 30.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution establishing the price for the sale of fresh fish in the municipality of San Juan:

"SECTION 1. From and after this date the price for sale of fresh fish in the municipality of San Juan shall be as follows:

"A. Tunny fish and those known as 'Colorado,' 'Picua,' 'Lisa,' 'Mero,' and 'Medregal,' of all sizes, 18 cents per pound.

"B. Fish known as 'Ronco,' 'Jurel,' 'Sabalo,' 'Coginua,' 'Bonito,' and all other fish not included in paragraph A, 14 cents per pound.

"SEC. 2. Any violation of this resolution shall be punished by fine not exceeding \$1,000 or imprisonment not exceeding two months.

"SEC. 3. Resolution No. 13, dated December 1, 1917, adopted by this food commission, 'To regulate the sale of fish in the municipality of San Juan,' is hereby repealed.

"SEC. 4. This resolution shall be effective at once.

"SAN JUAN, P. R., *February 18, 1918.*"

#### RESOLUTION No. 31.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution:

"SECTION 1. The prices for the sale of domestic corn and corn meal shall not exceed the following, in any municipality of the island of Porto Rico:

"Whole corn, at wholesale, \$3 per 100 pounds.

"Whole corn, at retail, 3½ cents per pound.

"Corn meal, at wholesale, \$4 per 100 pounds.

"Corn meal, at retail, 5 cents per pound.

"SEC. 2. Any violation of this resolution shall be punished by a fine not exceeding \$1,000 or imprisonment not exceeding two months.

"SEC. 3. This resolution shall be effective from and after February 25, 1918.

"SAN JUAN, P. R., *February 18, 1918.*"

#### RESOLUTION No. 32.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution:

"SECTION 1. No article in the manufacture of which wheat flour is used shall be made at any bakery, confectionery, or pastry shop after noon time on days preceding a 'wheatless day.'

"SEC. 2. During 'wheatless days' the preparation of mixtures or doughs and all work in connection with the manufacture of bread, confections, etc., shall be permitted, but nothing shall be baked before 10 p. m. on said days.

"SEC. 3. Nothing contained in the two preceding sections shall be construed to restrict the right of bakers, confectioners, or manufacturers of pastry to manufacture any article without using wheat flour.

"SEC. 4. Any violation of this resolution shall be punished by a fine not exceeding \$1,000 or by imprisonment not exceeding two months.

"SEC. 5. The provisions of this resolution shall not affect the observance and enforcement of the regulations adopted by the United States Food Administration.

"SEC. 6. This resolution shall be effective at once.

"SAN JUAN, P. R., *February 19, 1918.*"

## RESOLUTION No. 33.

The food commission organized in pursuance of joint resolution No. 10 of the Legislative Assembly of Porto Rico approved April 12, 1917, has adopted the following resolution:

Whereas prior to our resolution No. 29, dated February 18, 1918, fixing prices for the sale of sugar in Porto Rico, a certain quantity of granulated sugar had been purchased in the United States at a price higher than that fixed in the resolution aforesaid; and

Whereas it has been duly shown that the purchase aforementioned was a bona fide purchase; and

Whereas it is not the intention of this food commission to cause any unnecessary hardship to commerce: Now, therefore,

*The Porto Rico Food Commission resolves:*

"SECTION 1. Resolution No. 29, dated February 18, 1918, adopted by the food commission, is hereby amended in the sense that granulated sugar which has arrived in Porto Rico prior to February 25, 1918, may be sold at the rate of 9 cents per pound for a period of 30 days, beginning from this date.

"SEC. 2. This resolution shall be deemed canceled as to each individual merchant as soon as his stock of such granulated sugar is used up, but in no case shall such term extend beyond the period of 30 days.

"SEC. 3. This resolution shall become effective immediately.

"SAN JUAN, P. R., *February 26, 1918.*"

## RESOLUTION No. 34.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico approved April 12, 1917, has adopted the following resolution to amend resolution No. 30, dated February 18, 1918:

"SECTION 1. Resolution No. 30 of the food commission of Porto Rico, adopted on the 18th day of February, 1918, is hereby amended so as to include in Class A, providing for the sale of fresh fish in San Juan at a price not to exceed 18 cents per pound, the following kinds of fish:

"A. Tunny fish or 'Bonito,' 'Colorado,' 'Picua,' 'Lisa,' 'Mero,' 'Sierra,' 'Pargo,' 'Arrayado,' 'Corvino,' 'Coginua,' and 'Robalo.'

"SEC. 2. Class B shall include all other kind of fish not mentioned in Class A, and the price thereon shall not exceed 14 cents per pound.

"SEC. 3. Sections 2 and 3 of resolution No. 30 are hereby maintained in force.

"SEC. 4. This resolution shall become effective at once.

"SAN JUAN, P. R., *March 5, 1918.*"

## RESOLUTION No. 35.

The food commission created by joint resolution No. 10 of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution:

"SECTION 1. That every wholesale or retail, or wholesale and retail dealer in foodstuffs (excepting establishments declared as 'ventorrillos' or garden truck stands) shall post in a conspicuous place in his establishment a printed form furnished by the food commission in which he shall insert the maximum selling price of each article included or which he may hereafter be directed to include in said printed form.

"SEC. 2. The prices stated in said forms shall be maximum prices and shall in no case exceed those fixed by the food commission on one or several specified articles.

"SEC. 3. When by virtue of market fluctuations the selling price of an article should be changed this may be done by means of a sticker in the proper place showing the new price.

"SEC. 4. Any merchant or partnership who fails to post the aforesaid notice in a conspicuous place, or who charges for any article a price higher than that stated in the notice without having made due correction thereon, or who advertises foodstuffs in said notice at prices in excess of those fixed by the food commission (where such prices have been fixed) shall be liable under the law to a maximum fine of \$1,000 or confinement in jail for not more than two months.

"SEC. 5. This resolution shall take effect on and after May 1, 1918.

"SAN JUAN, P. R., *April 15, 1918.*"

## RESOLUTION No. 36.

The food commission established by joint resolution No. 10 of the Legislative Assembly of Porto Rico approved April 12, 1917, has adopted the following resolution to amend resolution No. 25, dated January 30, 1918:

"SECTION 1. Resolution No. 25, dated January 30, 1918, is hereby amended to prohibit the selling or serving of fresh milk at hotels, restaurants, casinos, clubs, or other public places or streets within the urban zones in the island of Porto Rico, as well as any other articles in the manufacture of which fresh milk shall be used, as recited in the resolution subject of the present amendment.

"SEC. 2. This resolution shall become effective at once.

"SAN JUAN, P. R., May 13, 1918."

## RESOLUTION No. 37.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved April 12, 1917, has adopted the following resolution to amend Resolution No. 28, dated February 6, 1918.

"SECTION 1. Section 2 of resolution No. 28 adopted by the food commission under date of the 6th of February, 1918, is hereby amended to prohibit the selling or serving of wheat flour at hotels, restaurants or other public places, as well as any other article, in the manufacture of which, wheat flour shall be used, as recited in the resolution subject of the present amendment.

"SEC. 2. This resolution shall become effective at once.

"SAN JUAN, P. R., May 13, 1918."

## RESOLUTION No. 38.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved on the 12th day of April, 1917, has adopted the following resolution to repeal Resolution No. 17 of December 10, 1917, and to establish new maximum prices for the sale of rice in the island of Porto Rico:

Whereas the available stock of rice now in Porto Rico will scarcely carry for the normal consumption of the two next coming months, and

Whereas the prices formerly established by the food commission for the sale of rice, which have ruled since the 10th day of December, 1917 until this day, are lower than those then, and at present prevailing in the original markets, and

Whereas it becomes necessary to effect new purchases of this cereal to provide for the requirements of our local markets, which could not be made at figures within the prices formerly established by the food commission, due to the advance in the original markets, as above stated, and

Whereas rice is one of the most vital and urgent necessities of life in Porto Rico on account of its large consumption: Now, therefore,

*The food commission of Porto Rico resolves:*

"SECTION 1. Resolution No. 17, dated the 10th day of December, 1917, is hereby repealed.

"SEC. 2. The following maximum prices are hereby established for retail sales of rice in any town, village, or ward (barrio) in the island of Porto Rico:

	Cents.
"A. For each and every pound of unbroken rice.....	11
"B. For each and every pound of rice with mixed grains, in a proportion not under 50 per cent of whole grains.....	10
"C. For each and every pound of rice with mixed grains, in a lower proportion of whole grains than above stated or screenings.....	9

"SEC. 3. The determining of the quality or standard of rice shall be agreed upon between seller and buyer, and to the effects of this resolution rice of the first, second, and third quality shall be such as described in the preceeding section 2.

"SEC. 4. All sales by any person, firm, corporation, or association at prices higher than these respectively set forth in section 2, shall constitute a violation of this resolution, and shall be punished by fine not exceeding \$1,000 or imprisonment not exceeding two months.

"SEC. 5. This resolution shall have legal effect and be in force on the 20th day of May, 1918.

"SAN JUAN, P. R., May 13, 1918."

## RESOLUTION No. 39.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, has adopted the following resolution to establish the price and to regulate the sale of gasoline and kerosene oil:

"SECTION 1. The price for the sale of gasoline shall in no case exceed 55 cents per gallon, in towns with railroad connections or port facilities, and 56 cents per gallon in towns in the interior of the island; and the price for the sale of kerosene oil shall not exceed \$2.50 per case of 10 gallons, in towns with railroad connections or port facilities, and \$2.55 per case of 10 gallons in interior towns.

"SEC. 2. The sale of gasoline shall be permitted only in quantities sufficient for the immediate needs of the purchaser, and sales shall be limited, as far as possible, to the regular customers of each stand or warehouse.

"SEC. 3. Pleasure trips, by land or sea, requiring gasoline or kerosene oil for fuel, shall be discontinued while the present circumstances shall subsist, and dealers in gasoline or kerosene oil are requested to restrict their sales for the above purposes.

"SEC. 4. All sales of gasoline in a larger quantity than required for the daily consumption shall have to be approved by the food commission.

"SEC. 5. Any violation of this resolution shall be punished by fine not exceeding \$1,000 or imprisonment not exceeding two months.

"SEC. 6. This resolution shall become effective at once.

"SAN JUAN, P. R., June 11, 1918."

AMENDMENT TO RESOLUTION NO. 39, AS TRANSMITTED BY TELEGRAPH TO ALL MAYORS AND DISTRICT CHIEFS OF POLICE OF THIS ISLAND.

"The price of gasoline is hereby altered so that the proportional cost of transportation shall be added to the 55 cents per gallon.

"Price for kerosene oil is also altered to \$2.65 per case of 10 gallons, adding thereto transportation within the island."

In conformity with the foregoing, the maximum price per gallon of gasoline all over the island is 55 cents, to which may be added the proportional cost of transportation.

The maximum wholesale price for kerosene oil of the current quality is also altered, and it shall not exceed \$2.65 per case of 10 gallons, plus transportation charges to the town in which sold.

When selling by the quart, the retailers shall only be entitled to a reasonable profit, equal to that obtained on the same article previous to the war.

SAN JUAN, P. R., June 13, 1918.

## RESOLUTION No. 40.

The food commission, established by joint resolution No. 10, of the Legislative Assembly of Porto Rico, approved the 12th day of April, 1917, has adopted the following resolution establishing a new price for the sale of fresh milk in the municipality of San Juan:

"Whereas this food commission appointed a committee to consider the milk problem in this island, and specially at San Juan, and the said committee has been working on the subject for several weeks and has interviewed producers, dealers, and other interested persons, having thereafter made adequate recommendations to the food commission: Now, therefore,

"In accordance with said recommendations, the food commission of Porto Rico resolves:

"SECTION 1. The price for the sale of fresh milk within the municipality of San Juan will not exceed 12 cents per legal quart when the sale shall take place at the milk stands, and 14 cents per legal quart when the delivery is made by the seller or dealer.

"SEC. 2. Violations of this resolution shall be prosecuted and punished in accordance with the law.

"SEC. 3. Any resolution previously adopted by this food commission, in conflict with the present one, is hereby repealed.

"SEC. 4. This resolution shall take effect on and after Wednesday, the 19th day of June, 1918.

"SAN JUAN, P. R., June 15, 1918."

## RESOLUTION No. 41.

The food commission, established by joint resolution No. 10, of the Legislative Assembly, approved the 12th day of April, 1917, has adopted the following resolution repealing resolution No. 39:

"SECTION 1. Resolution No. 39, 'To establish the price and regulate the sale of gasoline and kerosene oil,' adopted by the food commission on the 11th day of June, 1918, and amended on the 12th day of June, 1918, is hereby repealed.

"SEC. 2. This resolution shall become effective at once.

"SAN JUAN, P. R., *June 19, 1918.*"



# INDEX.

	Page.
Agricultural committee, work of.....	514
Agricultural implements—Imports.....	18
Agricultural experiment stations:	
Publications.....	628
Work of.....	623
Agriculture:	
Development of.....	36
Municipal boards.....	61
Review of.....	623
Agriculture and labor, commissioner of, report of.....	621-649
Agriculture and Labor, Department of, work of.....	36
Aguadilla, report of health officer.....	220
Alcohol, exports.....	14
Anemia service, cases attended.....	176, 177
Animals, imports.....	13
Appointments, list of.....	43, 58
Appropriations, consolidated statement.....	330
Archives, Spanish.....	82
Arecibo, report of health officer.....	219
Arroyo, report of health officer.....	230
Assessments:	
Amount of.....	380
Value of.....	384
Assets, statement of.....	283
Associations, list of.....	107-109
Attorney general, report of.....	565-620
Automobiles:	
Assessed value.....	410
Number of.....	412
Value per unit.....	412
Bacon, imports.....	13
Banking activities.....	382
Bank deposits.....	7
Barceloneta, sanitation of.....	154
Bay rum, exports.....	14
Beans, imports.....	13, 15
Beehives:	
Assessed value of.....	410
Number of heads.....	412
Average value per unit.....	412
Beeswax, exports.....	14
Biological laboratory, work of.....	195
Births:	
Rate of.....	174
Number of.....	27
Blind asylum, report.....	28, 233
Boards, imports.....	14
Board of health, report of.....	28
Bonded indebtedness:	
Amount of.....	381
Outstanding.....	34
Bonds:	
Irrigation, sale of.....	41
Issues of.....	312, 381
Road, issuance of.....	38
Two million dollar issue.....	436
Boys' and girls' charity schools, report of.....	243



	Page.
Bread, imports.....	13
Breadstuffs, imports.....	13, 15
Bridges:	
Construction, rebuilding and repairs.....	427, 444
Fajardo-Cieba Road.....	436
Maintenance and repair.....	440
Portugues River.....	435
Vegas River. Yauco-Lares Road.....	435
Yabucoa-Humacao Road.....	435
Buba, description of.....	168
Budget, proposed.....	259
Budgets, recapitulation.....	256
Buildings:	
Assessed value of real property.....	404
Cost of construction and maintenance.....	39
Public, work on.....	453-462
Value of public.....	305
Work on.....	460
Butter imports.....	13
Camps, sanitary condition.....	8
Camunas, M., report of.....	621-649
Candles, imports.....	13
Cane, weighing of.....	90
Cane lands:	
Assessed value of real property.....	402
Average value per acre.....	408
Number of acres.....	406
Cantonment, erection of.....	4
Cano Guatemala on the Aguadilla-Lares Road, bridge over.....	435
Carnegie Library, report of.....	32, 563
Carriages, imports.....	15
Cars, imports.....	13, 15
Carts:	
Assessed value.....	410
Number of heads.....	412
Value per unit.....	412
Cattle:	
Assessed value.....	410
Number of heads.....	412
Average value per unit.....	412
Cement, imports.....	13
Champagne, imports.....	13
Cheese, imports.....	13
Chemicals, imports.....	13
Chemical laboratory, report of.....	200
Ciales, report of health officer.....	230
Cigarettes, exports.....	14, 18
Cigars, exports.....	14, 17, 18, 23
Citizenship:	
Rejection.....	569
Status of.....	577
Civil service:	
Distribution of positions.....	70-76
Examinations.....	68, 69
Changes in.....	70
Salaries.....	76
Civil service commission, report of.....	30
Coaches:	
Assessed value.....	410
Average value per unit.....	412
Number of.....	412
Coal, imports.....	13
Cocoa, exports.....	14
Cocoa and chocolate, imports.....	13
Coconuts, exports.....	14, 22

	Page.
Coconut lands:	
Assessed value of real property.....	402
Average value per acre.....	408
Number of acres.....	406
Coffee, exports.....	14, 19, 23
Coffee lands:	
Assessed value of real property.....	402
Average value per acre.....	408
Number of acres.....	406
Commerce, exports and imports.....	9-25
Commissioner of deeds, list of.....	99
Congenital debility, cases of.....	175
Consular officers, number of.....	84
Consuls, list of.....	110
Cordage, imports.....	13
Corn meal, imports.....	13
Corporations:	
Capital stock.....	81
Number of.....	81
List of domestic.....	99, 101
List of foreign.....	100, 103
Organization of.....	81
Cosmetics, exports.....	14
Cotton, exports.....	14
Cotton, manufactures of, imports.....	13, 15
Cotton, Sea Island, exports.....	14
Courts:	
Juvenile.....	571
Personnel.....	614
Report on.....	572
Work of.....	583
Cow's milk, samples examined.....	203
Cloths, imports.....	13
Crimes, arrests for.....	64
Crimes and offenses, statements of.....	604
Dairy products, imports.....	13, 15
Deaths:	
Number of.....	27
Rate of.....	27
Dental examiners, board of, report of.....	31
Diarrhea, cases of.....	175
Diphtheria, cases of.....	173
Disbursements, statement of.....	324
Donkeys:	
Assessed value.....	410
Number of heads.....	412
Value per unit.....	412
Drug stores, inspection of.....	88
Earthen, stone, and china ware, imports.....	13
Education:	
Commissioner, report.....	507-564
Continuation schools.....	512
Enrollment.....	35, 507, 530
Expenditures.....	508, 549
Graded schools.....	511
High schools.....	512
Legislation.....	525
Parents' associations.....	514
Population school age.....	544
Private schools.....	549
Pupils, distribution.....	546
Receipts and expenditures.....	558
Rules and regulations.....	525
Rural.....	510
Rural conferences.....	514

Education—Continued.		Page.
Schools.....		511
School bands.....		522
School board activities.....		528
School board finances.....		555
School buildings.....		508-545
School buildings, number of.....		36
School buildings and sites.....		527
School and home gardens.....		515, 559
School libraries.....		521
School lunches.....		522
School population.....		507
Teachers—		
Number.....		508, 552
Salaries.....		552
Teachers' meetings and institutes.....		524
Election, votes cast.....		3
Electric lights, construction of.....		464
Electric plants, assessed value of real property.....		404
Enteritis, cases of.....		175
Estimates, statement.....		364
Estruco, Guillermo, report of.....		425-505
Excise stamps, sales of.....		325
Excise taxes, statement of.....		387
Executive orders, list of.....		26
Expenses, statement of.....		285
Explosives, imports.....		13
Exports:		
Table showing.....		12, 24
Value of.....		6
Fajardo, report of health officer.....		227
Felonies, number committed.....		64
Fertilizers, imports.....		13, 15
Fibers, vegetable and textile grasses, imports.....		13
Filaria, cases of.....		174
Finances, statement of.....		32
Finance, department of, reorganization.....		377
Fires, number of.....		66
Fish, imports.....		13, 15
Fixtures in establishments, assessed value.....		410
Flour, import.....		15
Food and drugs, samples examined.....		202
Food and drug inspectors, reports of.....		231
Food commission, work of.....		46
Food supply:		
Conservation.....		513
Question of.....		512
Forest service, work of.....		621
Frambesia, description of.....		168
Franchises:		
List of.....		67
Ordinances passed.....		80
Fruits:		
Exports.....		14, 22
Imports.....		13, 22
Fruit lands:		
Assessed value of real property.....		402
Average value per acre.....		408
Number of acres.....		406
Furniture:		
Assessed value.....		410
Imports.....		14
Gau, description of.....		168
Glass and glassware, imports.....		13
Governor, appointments by.....		58
Grand juries, organization.....		615
Grapefruit, exports.....		14, 22

	Page.
Guanica, report of health officer.....	230
Hams and shoulders, cured, imports.....	13
Harbors and docks:	
Vessels entering.....	41
Receipts.....	41
Work done.....	473
Health, conditions as to.....	28
Health, commissioner of, report.....	135-262
Health department:	
Expenditures.....	249
Organization.....	137
Hides, exports.....	14
Home economics, work in.....	516
Honey, exports.....	14
Horses:	
Assessed value.....	410
Number of head.....	412
Average value per unit.....	412
Hospitals, erection of antituberculosis.....	27
Houses, assessed value of real property.....	404
Humacao, report of health officer.....	219
Hunting licenses.....	83
Income tax collection.....	385
Income, statement of.....	284
Imports:	
Table showing.....	12
Value of.....	6
Indebtedness, interest-bearing.....	312
India rubber, imports.....	13
Industrial establishments, inspections.....	633
Infantile mortality, rate of.....	142
Infantile tetanus, cases of.....	174
Inheritance taxes, collections.....	386
Insane asylum, report of.....	27, 237
Institute of Tropical Medicine and Hygiene, work of.....	29
Instruments and apparatus, scientific, imports.....	13
Insular revenues, statement.....	357
Insurance transactions.....	383
Interior, commissioner of, report of.....	425
Internal revenue, amount derived.....	380
Iron imports.....	13, 15
Irrigation:	
Acreage.....	41
Improvements.....	41
Appeals.....	573
Isabela project, map of.....	504
Lajas project, map of.....	505
Lands under.....	478
Projects.....	477
Report on.....	477-450
Water supply.....	479
Irrigation service, financial statement.....	372
Isabela, report of health officer.....	229
Juana Diaz, report of health officer.....	229
Justice, department of, report of.....	42
Jute bags, imports.....	13, 15
Kern, Howard L., report of.....	565-620
Labor:	
Condition.....	37, 629
Disputes.....	630
Employment agencies.....	631, 643
Laws.....	630
Investigations.....	642, 646
Women and children.....	644

	Page.
<b>Lands:</b>	
Leased.....	469
Public, report on.....	465
Surveys.....	39, 466
<b>Lands, public:</b>	
Administration of.....	465
Leased.....	469
<b>Lard, imports.....</b>	<b>13</b>
<b>Lard compounds, imports.....</b>	<b>13</b>
<b>Leather, imports.....</b>	<b>13, 15</b>
<b>Leather, sole, exports.....</b>	<b>14</b>
<b>Legislature:</b>	
Acts passed by.....	51
Resolutions passed by.....	55
Work of.....	25
Sessions of.....	4
<b>Leper colony:</b>	
Conditions at.....	142
Patients in.....	176
<b>Leprosy, reports on.....</b>	<b>164</b>
<b>Liabilities, statement of.....</b>	<b>283</b>
<b>Liberty Loans, subscriptions.....</b>	<b>5</b>
<b>Loans:</b>	
Municipalities.....	286
School boards.....	296
<b>Machinery:</b>	
Assessed value.....	410
Assessed value of real property.....	404
<b>Malaria:</b>	
Cases of.....	148, 172
Reports on.....	148-157
<b>Manual arts, work in.....</b>	<b>518</b>
<b>Malt liquors, imports.....</b>	<b>13</b>
<b>Marriages, number of.....</b>	<b>174</b>
<b>Marsh lands:</b>	
Assessed value of real property.....	404
Average value per acre.....	408
Number of acres.....	406
<b>Mayaguez, report of health officer.....</b>	<b>217</b>
<b>Measles, cases of.....</b>	<b>171</b>
<b>Meat products, exports.....</b>	<b>14</b>
<b>Meat imports.....</b>	<b>13, 15</b>
<b>Medical examiners, board of, report of.....</b>	<b>31</b>
<b>Medical inspectors, report of.....</b>	<b>212</b>
<b>Medical topography, preparation of chart.....</b>	<b>206</b>
<b>Merchandise, assessed value.....</b>	<b>410</b>
<b>Military registrations report on.....</b>	<b>4</b>
<b>Milk:</b>	
Analysis of.....	145
Condensed, imports.....	13
<b>Molasses, exports.....</b>	<b>14</b>
<b>Money, assessed value.....</b>	<b>410</b>
<b>Mortality:</b>	
Deaths over 30.....	177
Rate of.....	174
<b>Motor vehicles:</b>	
Number registered.....	500
Tax on.....	40
<b>Mules:</b>	
Assessed value.....	410
Number of heads.....	412
Average value per unit.....	412
<b>Municipalities:</b>	
Expenditures.....	35
Receipts.....	35
Loans to.....	296
<b>Musical instruments, imports.....</b>	<b>13</b>

Notaries public:	Page.
List of .....	111
Number of .....	84
Nuts, exports .....	14
Oats, imports .....	13
Oculist-physician, report of .....	233
Oils, mineral and vegetable, imports .....	13
Onions, imports .....	13
Oranges, exports .....	14, 22
Orange lands:	
Assessed value of real property .....	402
Average value per acre .....	408
Number of acres .....	406
Pacheco, R. Siaca, report of .....	77, 133
Paints, pigments, and varnishes, imports .....	13
Paper, imports .....	13
Pardons, action on .....	81
Paroles, number granted .....	28
Passports, issuance of .....	78
Pasture lands:	
Assessed value of real property .....	402
Average value per acre .....	408
Number of acres .....	406
Patents and trade-marks, number registered .....	82
Patillas, report of health officer .....	231
Pathological laboratory, work done by .....	194
Pavements, work on .....	464
Peas, imports .....	15
Penal institutions, report on .....	43
Perfumeries:	
Exports .....	14
Imports .....	13
Pharmacy, board of, report of .....	31
Pian, description of .....	168
Pineapples, exports .....	14, 22
Pineapple lands:	
Assessed value of real property .....	402
Average value per acre .....	408
Number of acres .....	406
Police:	
Personnel of force .....	62
Work of .....	29
Ponce, report of health officer .....	216
Ponce-Guayama Road, bridges on .....	434
Population, estimated .....	190, 509
Pork, pickled, imports .....	13
Ports:	
Collections at .....	368
Vessels entering .....	475
Potatoes, imports .....	13
Prisoners, number of .....	604-610
Proclamations, list of .....	26
Prohibition, law as to .....	570
Propaganda, community and war .....	560
Property:	
Assessment of .....	380, 384
Assessed valuation .....	508
Valuation .....	321, 380
Public service commission, work of .....	45
Publications, printing .....	77
Public works, bureau of:	
Statement of appropriations and expenditures .....	426
Work of .....	426
Quarantine hospital, cases at .....	176
Railroads, map of .....	503
Raw material, assessed value .....	410
Real estate, valuation .....	304

	Page.
Receipts, statement of.....	324, 328
Receipts and disbursements, statement of.....	358, 362
Recommendations, statement of.....	48
Red Cross:	
Contributions.....	519
Work of.....	5
Reform school, report on.....	43, 572
Rice, imports.....	13, 15
Roads:	
Alto Brandera-Jayuya.....	429
Appropriations for.....	438
Arecibo-Lares.....	429
Bayamon-Los Alta.....	433
Bonds for construction.....	38
Ciales-Juana Diaz.....	432
Construction.....	302, 427
Corozal-Barros.....	431
Corozal-Morovi.....	433
Cost.....	302
Cost of maintenance.....	447
Dirt.....	447
Equipment, purchase, and repair.....	443
Expenditures for maintenance.....	365
Inspection.....	446
Landslides.....	443
Lares adjuntas.....	432
Las Piedras-San Lorenzo.....	430
List of.....	437
Maintenance, cost.....	367, 447
Maintenance and repair.....	440
Map of.....	503
Martin Pena-Bayamon.....	434
Material, purchase of.....	446
Mayaguez-Maricas, via Las Vegas.....	431
Mileage.....	302
Mileage constructed.....	503
Mileage of.....	38
Municipal, construction and maintenance.....	448
Recommendations.....	447
Retaining and protection walls.....	445
Road menders.....	443
Stone for repairs.....	441
Vieques Island.....	433
Yauco-Lares.....	430
Surveys.....	449-453
Road houses, repairs to.....	445
Rolling stock, assessed value.....	410
Rural credit law, extension to Porto Rico recommended.....	48
Sanitary engineering:	
Plans approved by.....	205, 211
Report of division.....	204
Sanitation, conditions as to.....	26
San Juan, report of health officer.....	215
Shipping, comparison.....	473
San Juan Harbor:	
Dredging.....	474
Improvements.....	475
Scales, inspection of.....	89, 90
Schools. <i>See</i> Education.	
School boards, loans to.....	296
Secretary of Porto Rico, report of.....	77-133
Seeds:	
Exports.....	14
Imports.....	13
Sewers, work on.....	464
Shipping, condition of.....	473

	Page.
Silks, imports.....	13
Skins, exports.....	14
Smallpox, cases of.....	173
Soap, imports.....	18
Soler, A. Ruiz, report of.....	135-262
Spirits, distilled:	
Exports.....	14
Imports.....	13
Steel, imports.....	13, 15
Stillbirths, number of.....	174
Straw hats, exports.....	14
Straw and palm leaf, imports.....	13
Strikes:	
Adjustment of.....	37
Table showing.....	632
Sugar:	
Exports.....	14, 15, 16, 23
Imports.....	13
Sugar, buildings and machinery; assessed value of real property.....	404
Sugar, exports.....	14
Supplies, printing and transportation, bureau of:	
Financial statement.....	130
Purchases and sales.....	131
Transportation division.....	133
Work of.....	95
Supply committee, work of.....	96
Tallow, exports.....	14
Taxes:	
Amount pending.....	317
Distribution.....	324
Property valuation.....	321
Teachers. <i>See</i> Education.	
Telegraph, insular.....	40
Operating expenses.....	370
Receipts and disbursements.....	369
Telegraph lines:	
Map of.....	503
Mileage.....	40
Work on.....	469
Telegraph and telephone bureaus:	
Work done.....	469, 470
Receipts and expenditures.....	471
Telephone, assessed value of real property.....	404
Telephones:	
Receipts and disbursements.....	369
Report on.....	470
Receipts.....	471
Telephone lines, map of.....	503
Territorial status, decision on.....	565, 577
Timber and brush lands:	
Average value per acre.....	408
Assessed value of real property.....	402
Number of acres.....	406
Tobacco lands:	
Assessed value of real property.....	402
Average value per acre.....	408
Number of acres.....	406
Tobacco:	
Exports.....	14, 18
Imports.....	13
Toys, imports.....	13
Transmissible diseases, report on.....	148
Treasurer, report of.....	377
Treasury:	
Financial condition.....	378, 379
Transactions of.....	33



	Page.
Trust funds, statement of.....	307, 360
Tuberculosis:	
Cases of.....	172
Reports on.....	157
Typhoid fever:	
Cases of.....	173
Reports on.....	163
Uncinaria, cases of.....	173
Uncinariasis, reports on.....	160-163
University of Porto Rico:	
Balance sheet.....	313
Expenses.....	314
Report of.....	31, 561
Unmanufactured tobacco, exports.....	14
Vega Baja, report of health officer.....	225
Vegetables, imports.....	13
Vessels, assessed value.....	410
Veterinary inspector, reports of.....	232
War activities:	
Work of.....	566
Accomplishments.....	4
War literature, use of.....	514
War work, statement of.....	5-8
Waterworks, improvements.....	463
Weights and measures, laws, violations.....	94
Weights and Measures, Bureau of, work done by.....	116
Work of.....	84-88
Wheat flour, imports.....	13
Whooping cough, cases of.....	174
Wines, imports.....	13
Wood, imports.....	14
Workmen's Relief Commission, work of.....	44
Yauco, report of health officer.....	228
Yeager, Arthur, report of.....	1-28

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**REPORT OF THE GOVERNOR GENERAL OF THE  
PHILIPPINE ISLANDS**

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**I**



## CONTENTS.

	Page.
<b>Report of the Governor General</b> .....	1
National Guard .....	1
Effect of the war on the Philippine Islands.....	4
Economic conditions .....	5
Political .....	6
Fourth Philippine Legislature, second session.....	6
Philippine National Bank .....	7
Manila Railroad Co.....	7
National Coal Co.....	8
Finances of the Insular Government.....	8
Government personnel .....	10
Department of the Interior.....	12
Bureau of Non-Christian Tribes.....	12
Executive Bureau .....	12
Bureau of Constabulary.....	14
Philippine General Hospital.....	14
Department of Public Instruction.....	14
Bureau of Education.....	15
Philippine Health Service.....	15
Department of Finance.....	16
Bureau of Internal Revenue.....	17
Treasury Bureau .....	18
Budget .....	19
Department of Justice.....	19
Bureau of Prisons.....	20
Department of Agriculture and Natural Resources.....	20
Rinderpest .....	21
Rice cultivation .....	21
Bureau of Forestry.....	22
Department of Commerce and Communications.....	22
Bureau of Public Works.....	22
Bureau of Posts.....	23
Bureau of Supply.....	23
Bureau of Labor.....	24
Bureau of Coast and Geodetic Survey.....	24
<b>Report of the Secretary of the Interior</b> .....	25
Introductory statement.....	25
General statement of policy.....	26
General operation and activities.....	27
Filling of vacancy in municipal offices.....	28
Condemnation proceedings.....	28
Various provincial matters.....	29
Works among non-Christians.....	29
Law and order.....	30
Executive Bureau.....	31
Bureau of Non-Christian Tribes.....	36
Bureau of Constabulary.....	40
Philippine General Hospital.....	41
Board of Pharmaceutical Examiners.....	44
Board of Medical Examiners.....	45
Board of Dental Examiners.....	45
Charity wards.....	46
Government orphanage.....	47
City of Manila.....	48
City of Bagulo.....	50

	Page.
Report of the Bureau of Non-Christian Tribes .....	53
Organization .....	53
Territorial jurisdiction .....	54
General statement of conditions at the close of the year .....	55
Legislation .....	56
Policy of the Government .....	56
Provincial and municipal organization .....	56
Finance .....	57
Public instruction .....	58
Public health .....	59
Agriculture .....	60
Public order .....	61
Justice .....	64
Prisons .....	64
Public works .....	65
Immigration .....	68
Agricultural colonies .....	69
Public lands .....	71
Forests .....	72
Mineral products .....	72
Marine products .....	73
Commerce and shipping .....	73
Manufactures .....	75
Banks and credits .....	75
Political conditions .....	75
Inspections .....	76
Personnel .....	76
Christian, Mohammedan, and Pagan relations .....	79
Recommendations .....	80
Conclusion .....	84
Report of the Secretary of Public Instruction .....	85
Bureau of Education .....	85
Tuition fees .....	87
Normal schools .....	88
Agricultural schools .....	88
Trade and special schools .....	89
Libraries .....	90
School attendance of girls .....	90
Eleemosynary institutions .....	91
Teachers and salaries .....	92
American teachers .....	92
Philippine Health Service .....	93
Cholera .....	93
Smallpox .....	93
Plague .....	94
Typhoid fever .....	94
Diphtheria .....	94
Measles .....	94
Council of hygiene .....	94
Food and drug inspection .....	95
Provincial cemeteries .....	95
Hospitals .....	95
Sanitary work in the Provinces .....	95
Sanitary commissions .....	95
Tuberculosis .....	96
Office of hygiene and industrial development .....	96
District nursing .....	96
Property office .....	97
Mindanao and Sulu .....	97
Summary .....	97
Bureau of Quarantine Service .....	97
Activities .....	97
General .....	98
Current appropriation .....	99
Needs .....	99

<b>Report of the Secretary of Public Instruction—Continued.</b>	<b>Page.</b>
Private schools.....	100
University of the Philippines.....	101
Public-welfare board.....	101
<b>Report of the Secretary of Finance</b> .....	<b>103</b>
<b>Bureau of the Treasury</b> .....	<b>105</b>
General treasury funds.....	105
Special funds.....	108
Bonded indebtedness.....	110
Guaranty of interest on bond issues of railway corporations.....	110
Investments.....	111
Banks and banking.....	111
Circulation.....	112
Insurance commissioner.....	112
<b>Bureau of Customs</b> .....	<b>112</b>
General trade conditions.....	112
Trade with the United States.....	113
Carrying trade.....	113
Imports.....	113
Cotton and its manufactures.....	114
Iron and steel.....	114
Rice.....	114
Other imports.....	114
Exports.....	115
Customs collections.....	116
Immigration and emigration.....	116
Shipping.....	116
Inspection of vessels.....	117
Marine officers.....	117
Documentation and licenses.....	117
Secret service.....	117
Consular duties.....	117
Arrastre division.....	117
Division of vessels.....	117
Lighthouse division.....	118
Marine railway and repair shops.....	118
<b>Bureau of Internal Revenue</b> .....	<b>118</b>
Collections.....	118
Apportionment of internal-revenue taxes.....	119
Cost of collection.....	119
Alcohol products.....	119
Tobacco products and matches.....	120
License taxes.....	121
Franchise taxes.....	122
Income tax.....	122
Pearl fishing.....	123
Sponge fishing.....	123
<b>Bureau of Printing</b> .....	<b>123</b>
<b>Report of the Secretary of Justice</b> .....	<b>125</b>
<b>Judiciary</b> .....	<b>125</b>
Supreme court.....	125
Courts of first instance.....	126
Collections.....	128
<b>Provincial courts of first instance</b> .....	<b>128</b>
<b>Justice of the peace courts</b> .....	<b>129</b>
General land registration office.....	129
Value of property registered under act No. 496.....	131
Code committee.....	132
Public utility commission.....	133
Administration of estates of deceased government employees.....	135
<b>Bureau of Prisons</b> .....	<b>135</b>
Bilibid prison.....	136
Conduct of prisoners.....	137
Prisoners' court.....	137
Maintenance.....	137
Religious services.....	138
Industrial division.....	138

## Report of the Secretary of Justice—Continued.

## Bureau of Prisons—Continued.

Provincial prisons .....	138
Schools .....	139
Health .....	139
Iwahig penal colony .....	140
San Ramon penal farm .....	140
Miscellaneous .....	140
Philippine Library and Museum .....	141
Division of archives, copyrights, etc. ....	143
Filipiniana division .....	145
Circulating division .....	146
Catalogue division .....	147
Iloilo Branch Library .....	147

## Report of the Secretary of Agriculture and Natural Resources

## Bureau of Agriculture

Philippine agriculture .....	149
Crop conditions .....	150
Personnel of the Bureau of Agriculture ..	150
Veterinary division .....	151
Plant industry division .....	151
Demonstration division .....	152
Fiber division .....	152
Office pest control .....	153
Office of the Rural Credit Associations ..	153
Office of publications .....	153
Food Commission .....	154
Bohol Filipino rice colony .....	156
Cayagan Filipino rice colony .....	156
Momungan agricultural colony .....	157
Cotabato agricultural colonies .....	157
Bureau of Forestry .....	158
Bureau of Lands .....	161
Bureau of Science .....	165
Weather Bureau .....	172

## First Annual Report of the Department of Commerce and Communications

Commerce .....	173
Bureau of Public Works .....	174
Roads and bridges .....	175
Port works .....	176
Buildings .....	176
Waterworks and irrigation .....	176
Registration of motor vehicles .....	177
Bureau of Posts .....	177
Bureau of Supply .....	178
Ice plant .....	178
Bureau of Labor .....	179
Bureau of Coast and Geodetic Survey ..	179
Corporations .....	179
Reports of the bureaus .....	180

# REPORT OF THE GOVERNOR GENERAL.

JANUARY 1 TO DECEMBER 31, 1917.

MANILA, *July 1, 1917.*

SIR: The event of overwhelming importance in the year 1917 was the entrance of the United States into the European war. This was weighted with the utmost significance for the people of the Philippine Islands. Whatever doubt may have heretofore existed in the minds of those not well informed on Philippine affairs as to the attitude of the Filipinos toward the United States has been dispelled forever. Ever since our entrance into the war there has been a series of expressions of loyalty and adherence to the cause of the United States from every Province and municipality of the islands and people of all walks of life. The demonstration of loyalty took concrete form in the offer of the Filipinos to supply a division of troops for service with the United States Army, in the further offer to supply the funds for the construction of a destroyer and a submarine to be used by the United States Navy, and in prompt and generous response to Red Cross appeals, and to the liberty loans. To those in close touch with the Filipino people these sentiments of friendship toward America were already understood and expected, especially after the passage of the Jones law giving to the Filipino people an autonomous form of government and promising them their future independence. The passage of this act removed all uncertainty as to the real intentions of the United States toward them. It needed only the coming of a great national crisis, such as the war, to allow these sentiments to burst into enthusiastic expressions.

The preparations for the enlistment and mustering in of the division of Filipino troops are going steadily forward, and great interest is felt in the islands over this opportunity to show to the United States the gratitude and appreciation of the Filipinos. The division, in accordance with the authority recently granted by Congress, will be ready for muster within the current year, and it is earnestly hoped that an opportunity for active service may be afforded it. The act of Congress providing for the federalization of the Philippine Militia and instructions from the War Department will require only 15,000 men, and at the present writing about 25,000 are already enrolled for this purpose.

## NATIONAL GUARD.

Act No. 2715, the militia act, was put in full force and effect on April 12, 1917, by Executive Order No. 35, and the immediate organization, equipment, and mustering into the National Guard ordered of the following: Three regiments of Infantry of three battalions each; one troop of Cavalry; two batteries of Field Artillery; two companies of Coast Artillery; the brigade, division, and general headquarters with their detachments and troops; an Adjutant Gen-



eral's Department; a Quartermaster Corps; a Medical Department; an Engineer Corps; an Ordnance Department; and a Signal Corps.

By the provisions of section 8 of Act No. 2715 these organizations constitute a general headquarters and a provisional division.

Lieut. Col. Francis C. Marshall, Fifteenth United States Cavalry, was recommended for detail as adjutant general, but before approval of detail by the War Department was ordered to the United States. He did, however, enter upon the duties of adjutant general on April 10, 1917, and rendered valuable services in the preliminary work of organization, until May 14, 1917, when he was succeeded by Col. Ralph W. Jones, assistant chief, Philippine Constabulary, who continues as adjutant general to date.

Additional officers from the Army have served as follows:

Maj. William N. Hensley, jr., Fifteenth United States Cavalry, as assistant chief quartermaster from April 19 to October 12, 1917.

Maj. Reuben N. Perley, United States Coast Artillery Corps, as assistant adjutant general from April 17 to date.

Lieut. Col. Lincoln C. Andrews, Ninth United States Cavalry, as inspector general from June 16 to August 15.

First Lieut. Pedro D. Dulay and Vicente R. Barros and Second Lieuts. Anastacio Q. Ver and Rafael L. Garcia, Philippine Scouts, United States Army, as inspector-instructors from June 20, June 29, June 3, and June 29, 1917, respectively, to date.

Maj. Richard Donovan, Coast Artillery Corps, as assistant chief of ordnance from June 19 to date.

Lieut. Col. Dennis P. Quinlan, Judge Advocate's Department, as Inspector General from September 22 to date.

Lieut. Col. Oliver L. Spaulding, Field Artillery, as instructor in artillery from August 7 to September 30.

Lieut. Col. Charles W. Weeks, Thirty-first Infantry.

Lieut. Col. Ernest E. Haskell, Twenty-seventh Infantry, and Maj. Elmer C. Desobry, Twenty-seventh Infantry, as instructors in infantry August 17 to 21, August 23 to September 4, and September 6 to 19, respectively.

Maj. W. Morris Chubb, Engineer Corps, as instructor of Engineers from July 24 to September 14, 1917.

Capt. Edward R. Andrews, Signal Corps, from August 4 to 14 and September 10 to October 12, 1917.

First Lieut. Herman G. Maul, Medical Corps, from August 4 to September 15, 1917.

Under the provisions of section 34 of the militia act officers were appointed for the units authorized. Temporary barracks and a drill hall were constructed on the field in the Port Area, Manila, and a school for 200 officers and 100 sergeants was conducted from July 23 to September 19. All of the units authorized have since been organized and given 30 days of active service and instruction.

The location of the various units of the National Guard is fixed as follows:

General headquarters, Manila.

Consisting in—

Adjutant general's department, Manila.

Quartermaster corps, Manila.

Ordnance department, Manila.

Inspector general's department, Manila.

**General headquarters, Manila—Continued.****Consisting in—**

Judge advocate general's department, Manila.  
 Medical department, Manila.  
 Engineer Corps, Manila.  
 Signal Corps, Manila.

**Division (provisional), consisting of three provisional brigades:****First Brigade (provisional), Manila and Southern Luzon.**

Headquarters (tactical), at residence of commander.

**Infantry, First Regiment—**

Headquarters' Company, Manila.  
 Supply Company, Manila.  
 Machine Gun Company, Manila.  
 Companies A, B, C, D, E, First Infantry, Manila.  
 Company F, Pasig, Rizal.  
 Company G, Santa Cruz, Laguna.  
 Company H, Batangas, Batangas.  
 Company I, Lucena, Tayabas.  
 Company K, Naga, Ambos Camarines.  
 Company L, Legaspi, Albay.  
 Company M, Sorsogon, Sor.

Field Artillery, Battery B, Manila.

Cavalry, Troop A, Lipa, Batangas.

**Coast Artillery—**

Company A, Manila.  
 Company B, Cavite, Cavite.  
 Engineers, Company A, Manila.

**Second Brigade (provisional), Northern Luzon.**

Headquarters (tactical), at residence of commander.

**Infantry, Second Regiment—**

Headquarters Company, Vigan, Ilocos Sur.  
 Supply Company, Vigan, Ilocos, Sur.  
 Machine Gun Company, Dagupan, Pangasinan.  
 Company A, Laoag, Ilocos Norte.  
 Company B, Vigan, Ilocos Sur.  
 Company C, Bangued, Abra.  
 Company D, San Fernando, La Union.  
 Company E, Lingayen, Pangasinan.  
 Company F, Tarlac, Tarlac.  
 Company G, Cabanatuan, Nueva Ecija.  
 Company H, Tuguegarao, Cagayan.  
 Company I, San Fernando, Pampanga.  
 Company K, Malolos, Bulacan.  
 Company L, Orion, Batan.  
 Company M, Baliuag, Bulacan.

Field Artillery, Battery A, Manila.

**Third Brigade (provisional), Visayas.**

Headquarters (tactical), at residence of commander.

**Infantry, Third Regiment—**

Headquarters Company, Iloilo, Iloilo.  
 Supply Company, Cebu, Cebu.  
 Machine Gun Company, Iloilo, Iloilo.  
 Company A, Calbayog, Samar.  
 Company B, Tacloban, Leyte.  
 Company C, Jagna, Bohol.  
 Company D, Surigao, Surigao.  
 Company E, Cebu, Cebu.  
 Company F, Cebu, Cebu.  
 Company G, Dumaguete, Or. Negros.  
 Company H, Bacolod, Occidental Negros.  
 Company I, Pototan, Iloilo.  
 Company K, Iloilo, Iloilo.  
 Company L, Capiz, Capiz.  
 Company M, San Jose, Antique.

**Engineers—**

Company B, Manila.  
 Company C, Manila.

On December 31 the strength of the National Guard was 304 officers and 4,693 enlisted men.

Act No. 2715 appropriated ₱756,000, from which ₱668,219.54 were expended, leaving a balance unexpended of ₱87,780.46.

#### EFFECT OF THE WAR ON THE PHILIPPINE ISLANDS.

Wherever possible the acts of Congress and the proclamations of the President pursuant thereto as to the treatment of war conditions have been put in force in the Philippine Islands by executive proclamation, and the work of handling local problems arising from the war has thus been very greatly facilitated.

Many questions of serious importance affecting the persons and property of alien enemy residents of the Philippine Islands have arisen for settlement since our entrance into the war, and particularly in connection with the seizure by the insular Government of 22 German merchant vessels which had taken refuge in Philippine harbors in the year 1914. On February 3, 1917, information was received that the officers and crews of these German merchant vessels had damaged the machinery of their ships, and by this act of willful destruction had rendered them incapable of immediate use and a menace to our harbors and to navigation in the event of typhoons. In order to prevent the possibility of further lawless violence on board these vessels, which might result in great damage to harbors and to other shipping, the undersigned instructed the chief of constabulary to place an armed force upon each one of these vessels and to place the officers and crews in the custody of the insular collector of customs. This was accomplished without any act of violence on either side and with the assistance of the United States Navy. Subsequently the officers and crews of these vessels were removed to an internment camp in Baguio, and later, in the month of November, 1917, were placed on board the United States Army transport and sent to internment camps in the United States. The vessels were taken charge of by the insular collector of customs and placed in all available shipyards for immediate repairs. They were subsequently, pursuant to congressional action, turned over to the United States Shipping Board, which generously permitted the Philippine Government to retain seven of the smaller vessels for interisland trade and commerce between the Philippines and near-by ports in China and Japan. These were used chiefly for the transportation of sugar and other Philippine products to China and Japan, and on the return trip were loaded with coal from the mines of Chingwangtao, contracted for on behalf of the purchasing agent of the Government and of the Manila Railroad Co.

It is desired to express the utmost appreciation of this Government for the very efficient manner in which the United States Navy in its local yards managed and conducted the repair and equipment of many of these German vessels.

Special gratitude and appreciation is due Admiral Austin M. Knight, United States Navy, and the officers under his command for their cooperation and the many helpful suggestions made by them in matters affecting the welfare of the Philippine people, as well as in those matters concerned with the proper safeguarding of our interests in time of war.

During the year a number of German residents of Manila were sent to internment camps in the United States, where the facilities were more adequate for the proper safeguarding of these persons than in the Philippines. Among the number that were sent to the United States were alien enemies guilty of propaganda in behalf of the German cause and utterances against the Government of the United States; also, several Germans out of employment whose presence here was thought to be a source of possible inconvenience to the community.

In general it may be said that the members of the foreign neutral community of Manila have conducted themselves with great discretion under the circumstances, but Government action was necessary in a few cases.

#### ECONOMIC CONDITIONS.

In commerce, the year 1917 was one of extraordinary prosperity. The exports were ₱191,000,000, as compared with ₱139,000,000 in 1916 and ₱107,000,000 in 1915.

The price of hemp rose tremendously, as did the price of copra. The production of all three of these articles increased as shown by the following figures:

Year.	Aba-a.	Copra.	Sugar.
	<i>Kilos.</i>	<i>Kilos.</i>	<i>Kilos.</i>
1915.....	154,192,492	171,573,983	322,102,669
1916.....	152,756,278	141,764,193	374,012,741
1917.....	160,953,355	186,510,962	384,722,167

The money in circulation in the islands, which at the beginning of 1916 was only ₱51,284,906 had reached the sum of ₱102,580,313 by the end of 1917, and is still mounting rapidly.

With the increase of money came a new confidence and an activity in investments throughout the islands. Wealthy Filipinos, who had theretofore been inclined to send their money for investment to France, Spain, or Hongkong, have now begun to interest themselves in Philippine investments. This, together with the general increase in wealth among the Filipino people, soon induced an unprecedented activity in financial and commercial matters in all the larger communities. Many new industrial and agricultural enterprises were started and the movement is still expanding. At the present writing, it seems certain that the old criticism of the Filipino that they were chiefly interested in politics and would never win their own economic independence is soon to be relegated to the past with many other discarded charges.

Throughout the country districts of the Philippine Islands, as well as in the larger cities, the Filipino of to-day has a new air of self-confidence and prosperity.

Up to the present time, war conditions have not fallen with severity upon the people here.

Neither in question of public order nor in matters affecting the daily lives of the inhabitants have the Philippine Islands been subjected to the same hardships and privations as most of the other countries of the world.

**POLITICAL.**

Politically, it is generally conceded that the world conflict renders discussion of the immediate independence of the islands inopportune, and there is a general consensus of opinion that the Philippine question, so long the topic of almost exclusive interest at all public gatherings, should not be taken up actively again until the termination of the war, when it is hoped that the United States will present the claims of the Philippines to an independent existence to the congress of nations.

**FOURTH PHILIPPINE LEGISLATURE, SECOND SESSION.**

The second session of the newly constituted Philippine Legislature opened with every evidence of harmony and enthusiastic determination to maintain the highly patriotic spirit of the first session.

The acceptance by both Houses of the new budget system en bloc as prepared by the executive departments was prompted both by a desire to establish a progressive and advanced system of public finance here and by a determination to prevent in the Philippines a possible introduction and growth of a system of "log rolling." The appropriation bill was passed on December 20, 1917, and became duly effective on January 1, 1918.

No one of the three acts vetoed by the Governor General at the end of the first session was brought up for passage over the veto, but Act No. 2726, "establishing cases of exception in the application of the death penalty," was passed as a substitute for the measure vetoed the preceding year which, in the opinion of the Governor General, had constituted a practical abolition of the death penalty. The new act exempted from the death penalty those persons who were under the age of eighteen at the time of the commission of the crime, and also those persons whose cases on appeal to the Philippine Supreme Court were not unanimously affirmed by the members of that court. This seemed to the undersigned a just and liberal provision, especially inasmuch as no jury system is known in the Philippines; thus, the adverse vote of one justice of the supreme court is now sufficient to prevent the application of the death penalty and the next lower penalty of life imprisonment comes automatically into effect.

Fifty-nine laws were passed at the last session of the Legislature and all received executive approval, excepting that which, by means of an amendment to the internal-revenue law, provided a protective duty on Philippine-manufactured matches. This was allowed to become a law without the Governor General's signature, with the intention of calling the attention of the Legislature at the next session to the necessity for a discussion of the general subject of protection with a view, if possible, of avoiding gradual fastening upon the people of these islands of a system of protective taxes without a full understanding of the responsibilities and inevitable consequences which would follow. The six acts passed by the Legislature which require, under the term of the Jones law, the approval of the President of the United States, were forwarded to him for consideration, and at the present writing all have been approved by the President excepting the new public-land law which is now under his consideration.

Among the more important acts passed is Act No. 2738, establishing a mint; Act No. 2742, "to guarantee an interest or profit on any capital invested in the establishment of a pulp and paper factory in the Philippine Islands;" Act No. 2747, containing amendments to the charter of the Philippine National Bank; Act No. 2753, authorizing provincial boards to establish and manage irrigation system and providing funds for this purpose; Act No. 2754, providing for the creation and promotion of a national merchant marine; Act No. 2776, reforming the coinage and currency system; an act to revise the land laws which provides, among other things, that public lands or lands which at any time have been part of the public domain may not in the future be sold to others than Americans or Filipinos, or to corporations composed wholly of citizens of the United States or Philippine Islands; Act No. 2779, providing free trade between the Philippines and Guam; Act No. 2780, authorizing the issue of bonds of the Government of the Philippine Islands, in connection with the joint resolution previously adopted, authorizing the Governor General to take the necessary steps to secure the early construction of a modern submarine and a modern destroyer for use of the United States Government during the war, and as a means of training young Filipinos in naval science, and joint resolution No. 9, authorizing the Governor General to purchase from the city of Manila the Ayuntamiento Building.

By the provisions of the Jones Act of August 29, 1916, which requires that no money shall be appropriated by the Government for the direct or indirect support of any religious institutions, the Government was obliged to withdraw the many patients therein, who were maintained in part by appropriation of the Government. These include a large number of orphans, insane, tuberculous patients, and many other classes of defectives. Through the patience and consideration of Rev. Michael O'Doherty, archbishop of Manila, the Government has been able gradually to solve this difficult problem. New buildings have been constructed to receive these patients, and after a considerable period of delay made necessary by the suddenness with which the Government was called upon to handle this matter, the question was satisfactorily settled.

#### **THE PHILIPPINE NATIONAL BANK.**

The newly created Philippine National Bank has had no small share in the sudden prosperity of the Philippines. Under the able presidency of the late Mr. Samuel Ferguson the bank has steered a wise and conservative course and has greatly improved general financial conditions. Rates of interest and of foreign exchange have fallen generally, and credit is now available for substantial enterprises for the immediate development of the resources of these islands.

#### **THE MANILA RAILROAD CO.**

The completion of the first year of Government control and operation of the Manila Railroad Co. showed great reforms by way of economy, and as a reflection of the general prosperity of the islands, the railroad completed this year with a profit of ₱816,639.39, as com-

pared with a loss of ₱823,465.05 in 1915, and a loss of ₱432,490.06 in 1916. This, in view of the annually recurring deficits of the several preceding years, was very gratifying indeed. A gradual reorganization of the personnel of the road is in process, and an attempt is being made to train Filipinos for more responsible positions in the service.

Upon the completion of his first year of service on the road, Mr. Eugene E. Reed, resigned as president and chairman of the board of directors to return to the United States, and Mr. E. J. Westerhouse, the director of public works, was subsequently elected manager of the road, and left the service of the bureau of public works. Hon. Manuel L. Quezon, president of the Philippine Senate, was elected president of the road and chairman of the board of directors.

#### NATIONAL COAL CO.

The National Coal Co., constituted by Act No. 2705, approved May 10, 1917, and financed chiefly by Government funds, was organized in March, 1918, with Mr. V. Madrigal as president and general manager, and Mr. C. H. French, the insular auditor, as vice president, and Mr. Dalmacio Costas as secretary. Messrs. C. E. Springer and Rafael Corpus are the other two directors. A great part of the year was spent in investigating the coal deposits of the islands, and on October 18, 1917, pursuant to the terms of Act No. 2719, the Governor General issued proclamation No. 39, withdrawing from entry, sale or other disposition, all coal-bearing public lands within the Province of Zamboanga. This was the result of the discovery of what are believed to be immensely valuable coal deposits there, which it is the intention of the Government to exploit through the National Coal Co. Within the next year there are substantial expectations of a domestic supply of fuel. In the meanwhile a small production of coal by private enterprises in the Province of Cebu leads to the expectation that the large tracts of coal land known to exist there and largely in private hands may also be made a valuable source of coal supply.

The subject of coal was under frequent consideration by the Government during the year on account of the extraordinary rise in the price of this article and the consequent increased cost of many public and private enterprises in the Philippines. A contract was entered into by the Manila Railroad Co. for the purchase of 50,000 tons of coal from the Kailan Mining Co. at Chingwangtao, and the Government contracted for a similar amount from the same company.

It is firmly believed that the success of the National Coal Co. will prove a factor in the economic developments of the islands, scarcely second in importance to the Philippine National Bank or the Government operation of the Manila Railroad Co.

#### FINANCES OF THE INSULAR GOVERNMENT.

The Government finances are in a more satisfactory condition than at any period in the history of the Philippines.

The auditor's report, which is printed as a separate document, shows that the current surplus of liquid capital of the insular government increased during the year 1917 in the sum of ₱9,372,523, thereby creating a total of ₱24,404,683, of which ₱20,151,947 is unappropriated. The increase in current surplus exceeded that for 1916 in the sum of ₱4,574,481. This is a remarkable contrast to the threat-

ened bankruptcy of the treasury only a few years ago, and as the great increase in current surplus bids fair to continue during 1918, an entirely new problem will be presented to the Government, viz, how best to keep the money in the islands in circulation and to prevent an undue proportion being locked up in the treasury. It is true that the public works bill of 1918 is nearly ₱5,000,000 greater than that of 1917, but with the constant drain from the service of engineers who are entering other occupations or the military service of the United States, it is doubtful whether the bureau of public works within the next couple of years will have a sufficient staff properly to spend this sum of money even though appropriated. The most notable increase in the expense of the central Government during 1917 was the aid to Provinces and municipalities which rose from ₱6,131,238 to ₱8,974,049. These contributions are made to assist in the construction and maintenance of highways, bridges, artesian wells, and other public works; for primary-school purposes and to meet recurring deficiencies in the local revenues of certain specific Provinces and municipalities.

The auditor recommends again the enactment of remedial legislation which shall provide a more fair distribution of revenues between the insular government and local governments. While it is true that in the non-Christian Provinces financial independence is not to be expected for some time to come, a more equitable distribution of the general income, especially the proceeds of license and business tax, would permit of a fuller autonomy of all provincial and municipal governments. The auditor reports also a net increase in the general expense of the Government of ₱1,387,656, due almost wholly to increase in cost of materials and supplies brought about by war conditions.

*Consolidated budget statement, fiscal year 1917 compared with fiscal year 1916.*

Items.	Fiscal year 1917.	Fiscal year 1916.	Increase (+), decrease (-).
<b>Budget credits:</b>			
<i>Revenue from taxation:</i>	<b>₱35,448,418.30</b>	<b>₱27,957,308.85</b>	<b>+ ₱7,491,103.35</b>
Import duties.....	11,183,322.41	9,871,687.34	+ 1,312,135.07
Excise tax.....	12,839,425.77	10,749,367.88	+ 2,184,057.89
Licenses and business tax.....	10,454,043.71	7,570,374.79	+ 2,883,668.92
Wharfage tax.....	1,137,622.26	1,265,082.42	- 127,460.16
Franchise tax.....	732,675.49	508,144.77	+ 223,530.72
Documentary tax.....	682,692.29	477,034.83	+ 205,657.46
Income tax.....	1,178,008.50	503,545.42	+ 674,463.08
Immigration tax.....	152,232.00	87,512.00	+ 64,720.00
Tonnage dues.....	152,690.49	81,770.98	+ 70,919.51
Inheritance tax.....	5,284.93	5,872.07	- 587.14
Apportionment of internal revenue to local governments.....	(3,164,083.55)	(3,164,083.55)	.....
<i>Incidental revenue:</i>	<b>2,896,870.32</b>	<b>1,664,392.05</b>	<b>+ 631,878.27</b>
Revenue from public forests.....	487,665.04	451,602.33	+ 36,062.71
United States internal revenue.....	1,253,851.23	714,947.40	+ 538,903.83
Fines and forfeitures.....	419,672.49	351,911.96	+ 67,760.53
Sales and rentals of public domain.....	70,957.64	23,353.59	+ 47,604.05
Other.....	64,123.92	122,578.77	- 58,452.85
<i>Earnings and other credits:</i>	<b>16,855,156.86</b>	<b>16,083,154.69</b>	<b>+ 772,002.17</b>
Operating revenue of commercial and industrial units.....	11,832,921.62	9,326,810.77	+ 2,506,110.85
Other income of operating units.....	52,626.02	175,262.89	- 122,636.87
Dividends on bank stock.....	314,786.78	157,526.05	+ 157,260.73
Income from U. S. A. T. freight service.....	337,470.62	125,315.10	+ 212,155.52
Income incidental to functional activities.....	2,710,641.22	2,914,185.51	- 203,544.29
Sales of fixed property.....	81,641.88	472,800.38	- 391,158.50
Sales of friar lands real estate.....	870,822.19	955,767.23	- 84,945.04
Sales of San Lazaro real estate.....	229,246.63	124,274.76	+ 104,971.87
Profits from sale of silver bullion.....	.....	1,811,212.00	- 1,811,212.00
Proceeds of loan from gold standard fund.....	425,000.00	.....	+ 425,000.00



# 10 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

## Consolidated budget statement, fiscal year 1917 compared with fiscal year 1916— Continued.

Items.	Fiscal year 1917.	Fiscal year 1916.	Increase (+), decrease (—).
<b>Budget credits—Continued.</b>			
<i>Credit adjustments—prior year</i> .....	181,401.86	.....	+ 181,401.86
Accounts payable adjustments.....	73,422.27	.....	+ 73,422.27
Inventory adjustments (sales stock).....	59,863.11	.....	+ 59,863.11
Expired money orders (sec. 1973, Adm. Code).....	19,487.10	.....	+ 19,487.10
Pension fund reversions.....	8,447.07	.....	+ 8,447.07
Receipts applicable to prior year.....	20,182.31	.....	+ 20,182.31
<b>Total budget credits</b> .....	<b>54,781,241.44</b>	<b>45,704,855.69</b>	<b>+ 9,076,385.75</b>
<b>Budget charges:</b>			
<i>Revenue service</i> .....	9,065,889.24	7,625,904.40	+ 1,439,984.84
Expense of revenue collection.....	1,151,680.26	1,131,685.26	+ 19,995.00
Operating expense of commercial and industrial units.....	7,912,148.98	6,492,219.14	+ 1,419,929.84
<i>Debt service</i> .....	4,187,928.11	1,709,490.44	+ 458,471.67
Interest on public debt.....	1,289,822.62	1,000,117.30	+ 289,705.32
Payments to sinking funds.....	835,639.49	686,873.14	+ 168,766.35
Repayment of loans.....	22,500.00	22,500.00	.....
<i>General welfare service</i> .....	29,457,890.55	25,354,849.41	+ 4,083,041.14
Executive direction and control.....	1,122,500.64	979,836.89	+ 142,663.75
Legislation.....	983,428.32	855,785.42	+ 124,642.90
Adjudication.....	1,517,048.10	1,533,100.20	- 16,052.10
National defense.....	598,578.31	.....	+ 598,578.31
Law and order.....	3,729,336.45	3,532,519.91	+ 196,816.54
Public health.....	2,114,650.46	2,092,791.74	+ 21,858.72
Suppression of animal diseases and plant pests.....	721,554.98	733,688.95	- 12,121.97
Protection against forces majeures.....	189,817.73	188,717.81	+ 27,900.08
Regulation of public utilities.....	44,401.76	67,601.02	- 23,199.26
Other protective service.....	89,409.06	90,554.79	- 1,145.73
Public education.....	4,378,207.76	4,318,294.85	+ 59,922.91
Public corrections.....	857,793.55	843,195.93	+ 14,597.62
Public charities.....	206,874.49	181,151.69	+ 25,722.80
Other social improvement.....	.....	58,250.52	- 58,250.52
Conservation of natural resources.....	278,736.95	283,906.12	- 5,169.17
Development of commerce.....	1,680,433.63	1,678,625.00	+ 11,808.63
Development of agriculture.....	1,719,692.37	1,548,392.89	+ 171,299.48
Philippine publicity.....	1,730.55	98,375.91	- 96,645.36
Development of industrial arts and sciences.....	190,382.26	191,463.00	- 3,110.74
Other economic development.....	155,491.03	115,080.51	+ 39,800.52
Aid to local governments.....	8,879,812.13	5,960,888.26	+ 2,888,923.87
<i>Outlays and investments</i> .....	5,992,291.45	6,042,123.55	- 8,049,832.08
Purchase and construction of public works.....	1,040,830.49	1,348,725.95	- 307,895.46
Purchase and construction of equipment.....	723,457.32	723,973.14	- 515.82
Corporate investments.....	1,494,328.68	3,297,497.27	- 1,803,168.59
Advances to railway companies under guaranty contracts.....	733,674.96	671,927.17	+ 61,747.79
<i>Extraordinary charges</i> .....	584,353.28	110,361.30	+ 473,401.98
Retirement gratuities, act 2549.....	584,353.28	99,476.30	+ 484,876.98
Exchange on advances to railway companies.....	.....	11,475.00	- 11,475.00
<i>Debit adjustments—prior year</i> .....	162,391.15	35,494.05	+ 126,897.08
Mindanao and Sulu Colonies.....	112,101.01	.....	+ 112,101.01
Accounts receivable written off.....	28,926.56	.....	+ 28,926.56
Cancellation of insurance claims.....	1,286.42	.....	+ 1,286.42
Prior year charges.....	20,077.14	35,494.05	- 15,416.91
<b>Total budget charges</b> .....	<b>45,408,717.74</b>	<b>40,906,813.13</b>	<b>+ 4,501,904.61</b>
<b>Increase in current surplus for the year</b> .....	<b>9,372,523.70</b>	<b>4,788,042.56</b>	<b>+ 4,574,481.14</b>
<b>Add—Current surplus at the beginning of the year</b> .....	<b>15,032,159.33</b>	<b>10,234,116.77</b>	<b>+ 4,798,042.56</b>
<b>Current surplus at the end of the year (see balance sheet)</b> .....	<b>24,404,683.03</b>	<b>15,032,159.33</b>	<b>+ 9,372,523.70</b>

## GOVERNMENT PERSONNEL.

Hon. Charles Emmett Yeater, of Missouri, having been appointed Vice Governor by the President, arrived in Manila on August 22, 1917, and assumed at once active charge of the office of secretary of public instruction.

Filipinization of the service has proceeded more rapidly than was anticipated on account of the large number of Americans leaving to enter the United States military service. This was particularly true

among the Constabulary officers, and to a lesser extent was felt in the other bureaus of the Government.

The director of civil service, in his report which is printed separately, states that the number of Americans in the service had decreased to 1,168 on January 1, 1918, compared with 1,310 in the previous year. Of those remaining in the service, 455 were professors, instructors, or teachers; 164 were clerical employees, including chief clerks, chiefs and assistant chiefs of divisions, clerks and stenographers; 154 were professional, technical, and scientific employees; and 140 were firemen, patrolmen, and prison guards; 99 were Constabulary officers and 44 were chiefs and assistant chiefs of bureaus and offices. Since the first of this year this number has materially decreased.

Many Americans leaving the service took advantage of Act No. 2589, known as the Osmeña retirement law. In 1917, 187 Americans and 28 Filipinos were retired under the provisions of that law. Up to the end of the year the total liability incurred under this law is ₱1,928,517, of which ₱683,629 has been paid, the balance being payable in equal monthly installments covering a period of three years from the date of retirement. On the 1st of January there were approximately 440 Americans still in the service entitled to the provisions of the retirement law. Thirty-two Americans were appointed to the service in 1917, only one of whom was appointed to a clerical position. One thousand two hundred and eighty-three Filipinos have received original appointments during the year, of whom only 106 were appointed from Spanish examinations, a decrease in Spanish examinations being notable. Forty-nine Americans were appointed from the United States, of whom 46 were teachers, 2 civil engineers, and 1 veterinarian.

The whole subject of salaries should be reconsidered by the Philippine Legislature. The salary act of December 14, 1916, effected a general reduction in salary as positions became vacant, but is evidently not suitable to a period such as the present when the cost of living has risen so much and when the rapidly increasing business of the commercial houses has tempted so many government officials to leave the public service for higher salaries in private life. A salary standardization committee, appointed by the Governor General, rendered its report during the year, patterned after the report of the New York State Senate Commission of 1916 on the civil service. No action was taken on this report by the last legislature.

A memorandum order was issued by the Governor General for the purpose of forbidding the bureaus against bidding with one another for the services of employees. This was necessary on account of the great increase in transfers from one bureau to another. Another memorandum order was issued defining and strengthening and continuing in force the rule against political activity on the part of civil-service employees. Also, an order was issued restricting suspension from office, under certain circumstances, when under charges, a practice which had worked hardship both on individuals and on the service. A fourth order gave assurance to those entering the Federal military service as to holding open their positions for a certain length of time in the Philippine service. It is hoped that the legislature will extend this assurance into a law holding open positions

in this service during the course of service in the Federal Government and allowing temporary promotions to fill vacancies thus created.

The undersigned joins heartily in the recommendation of the director of civil service that a permanent contributory pension and retirement system be adopted by this Government, the pensions granted to be guaranteed by the Government.

#### DEPARTMENT OF THE INTERIOR.

Hon. RAFAEL PALMA, secretary; Hon. THEODORE M. KALAW, undersecretary.

Individually, or through the executive bureau, the secretary of the interior exercises supervision and control over all provincial and municipal governments and the chartered cities of Manila and Baguio. The policy of the Government has been to cultivate amicable relations between local representatives of the Government and the people throughout the islands; to safeguard and strengthen the growth of autonomy in the various localities; to expand and maintain civil government control in Mohammedan and Pagan regions; to encourage the advancement of all non-Christian inhabitants and their gradual assimilation with the other peoples of the islands.

The preservation of peace and public order throughout the archipelago, under the immediate supervision of the secretary of the interior, has met with unqualified success throughout the year 1917. One military engagement took place at the Moro cota of Bayan in Mindanao, which had defiantly withheld itself from Government supervision and control for many years. The reduction of this fortress was brought about through the use of a mountain battery borrowed from the military authorities, and without the loss of a single life on the part of the constabulary engaged in the undertaking. It is believed that this was the last stronghold of armed resistance to the Government in the Moro regions to-day.

The secretary of the interior comments upon the difficulty of perfecting the separation of church and state in the Mohammedan regions of the archipelago; and the tactful methods which are requisite to the successful solution of this problem.

#### BUREAU OF NON-CHRISTIAN TRIBES.

Hon. Frank W. Carpenter, the governor of the Department of Mindanao and Sulu, was appointed director of the newly created bureau, which was instituted according to the terms of the Jones Act of August 29, 1916, and Mr. Vicente Morente, the assistant chief of the executive bureau, was designated to act in his absence from the Manila office. The details of Government, throughout the non-Christian districts, are so fully and interestingly set forth in the report of Gov. Carpenter, printed herewith, that no detailed reference to these features of government is thought necessary at this place. For the second year in succession, not a single case of head-hunting was reported in the Mountain Province:

#### EXECUTIVE BUREAU.

In the general reorganization of the Government in the 1916-17 session of the Legislature, the executive bureau was completely

changed, Mr. De Veyra, former executive secretary, becoming Resident Commissioner from the Philippine Islands in the United States, and Mr. Lavadia, his assistant, becoming undersecretary of commerce and communications. Mr. Francisco Enage, on January 27, 1917, then provincial fiscal of Iloilo, was appointed chief of the executive bureau, and a month later, Mr. Vicente Morente, then provincial treasurer of Cebu, was appointed assistant. The authorized positions in the bureau were reduced from 137 to 124. In the aforementioned reorganization, the direct connection of the executive bureau with the office of the Governor General was severed, and the immediate supervision of the executive bureau was transferred to the secretary of the Interior. In accordance with this arrangement, the executive bureau thereupon ceased to transact the following matters, which were carried over into the office of the Governor General:

Transportation of Government employees on United States Army transport.  
Correspondence with the Bureau of Insular Affairs, United States consuls abroad, and foreign consuls in the Philippines.

Appointments by the Governor General.

Pardons.

Passports.

Extraditions.

Titles to land acquired by Provinces and municipalities for public purposes.

Homestead, sale, town site, and free patents.

Executive orders and proclamations.

Loans to Provinces and municipalities.

In connection with the general supervision over municipal and provincial Governments exercised by the executive bureau, the work of the new bureau of non-Christian tribes was included.

During the year no change was effected in the organization of the provincial and municipal Governments, except in the Mountain Province where the position of third member of the provincial board was made elective.

All the provincial governors, excepting in three of the Provinces of the Department of Mindanao and Sulu, are Filipinos. Filipinization of provincial treasurers was also extended, so that at the end of 1917 there were 27 Filipinos and only 7 Americans.

The bureau handled during the year 71 cases of charges against municipal officials, of whom 45 were found guilty, 21 being removed from office, and 24 otherwise disciplined.

Most of the charges were based upon neglect of duty or abuse of official position, and only six were based upon crimes involving moral turpitude. In other words, as stated by the chief of the executive bureau, in the 779 municipalities, only 18 municipal presidents and 2 vice presidents were accused, and of the 7,052 councilors, but 48 were accused, many of the accusations being not substantiated.

Owing to the prevalence of gambling throughout the islands, the chief of the executive bureau in 1917 instituted a general campaign against this vice. Hearty cooperation was received from the provincial governors and severe action taken against those officials found to be guilty.

The chief of the executive bureau announces that he now has under consideration a plan for annual reports along uniform lines to be submitted in the future by the governors of all the Provinces.

## BUREAU OF CONSTABULARY.

Owing to the entrance of the United States into the European war many changes have taken place in the personnel of the Constabulary during the past year. From January 1 to April 11, the Constabulary was commanded by Brig. Gen. Herman Hall, United States Army; from April 11 to May 15, by Col. (now Gen.) Marcus D. Cronin, United States Army, and from May 15 to December 17, by Col. Rafael Crame, Philippine Constabulary, who, on December 17, was appointed brigadier general and chief of Constabulary. All officers of the United States Army were relieved from duty with the Philippine Constabulary. Filipinization of the commissioned grades in the Constabulary proceeded very rapidly, 103 Filipinos having been appointed third lieutenants during the year, and 92 American officers left the constabulary, so that only 102 remained in the service on January 1, 1918. Subsequently, and at the time of writing this report, there were only 30 left.

The total Constabulary force at the end of the year was 5,505 enlisted men and 358 officers. The increase in the strength of the Constabulary came about through the necessity of organizing six new companies in the Department of Mindanao and Sulu, the United States having gradually withdrawn all American regulars and the Philippine Scouts from these regions, except a battalion of the latter organization, which remains at Zamboanga.

Improvement in the service of the Municipal Police was noted during the year, and the entire force amounted to 6,290.

The chief of constabulary reports only minor disturbances in the mountains of Zambales, owing to unrest and dissatisfaction among the Negritos there. The Visayan Provinces were freed from outlaws by the final surrender of Oto de Roble.

## PHILIPPINE GENERAL HOSPITAL.

In October, 1916, Dr. Fernando Calderon became director of the hospital, succeeding Dr. Musgrave, and on February 12, 1917, Miss Anastacia Giron was appointed chief nurse and superintendent of nurses. For the first time in many years peace reigns in the General Hospital and an end has been put to the ceaseless controversies and disturbances among the student body and the staff of the hospital.

A high level of service was maintained, and the hospital is a model of neatness and has been conducted to the general satisfaction of the public.

## DEPARTMENT OF PUBLIC INSTRUCTION.

HON. CHARLES EMMETT YEATER, secretary; HON. ALEJANDRO ALBERT, undersecretary.

The duties of the secretary of public instruction were performed by Hon. Felix M. Roxas, undersecretary of public instruction, from the date of his appointment until the arrival on August 22 of Vice Gov. Charles E. Yeater. Subsequently Mr. Roxas resigned to enter the private practice of law, and Dr. Alejandro Albert, assistant director of education, was appointed in his place. This brought about the promotion of Mr. Luther B. Bewley to be assistant director of education and of Mr. Camilo Osias as second assistant director.

## BUREAU OF EDUCATION.

The remarkably efficient system of education established in the Philippines showed steady progress during the year 1917, the development of agricultural teaching being especially noticeable. In spite of the tremendous efforts made to build schoolhouses and open new schools it is still true that only one-half of the children of the islands are in public schools. Almost all of the schoolhouses are crowded, and it is obviously necessary that the work of the bureau should be greatly expanded by increased appropriation by the Legislature. This might be accomplished by a revision of the system of allotment of internal revenue or of real property tax. In conformity with the generally low tax rates in the Philippines it is safe to say that no country that maintains a system of free public schools levies as low a tax rate for that purpose as that fixed here. In the current appropriation bill, passed in the end of 1917, provision is made for additional normal schools, it being obviously essential to provide teachers before additional schools are opened. It becomes increasingly difficult from year to year to secure the teachers desired in the United States, and especially so now that the European war is absorbing so much of the youth and talent of the United States. It is necessary, therefore, to raise the standard of education of Filipino teachers themselves. The College of Education of the University is doing its share in providing teachers, but the need for new normal schools is paramount.

The secretary of public instruction in his report lays special stress on the great success of the agricultural school at Muñoz, Nueva Ecija, and new schools patterned after this model will undoubtedly be a feature of any future agricultural program.

Trade schools and the school of commerce have been eminently successful and are growing rapidly. In view of the recent remarkable interest displayed by the Filipinos in trade and commerce, the value of these schools becomes especially apparent.

Special attention is invited to the report of the secretary of public instruction containing a particularly interesting review of the educational system of the islands and of the needs for the future. Mention is made of the need for the increase in salaries of the teachers. Out of nearly 11,000 municipal teachers, approximately two-thirds receive less than ₱25 a month, a figure which is almost demoralizing to the service.

## PHILIPPINE HEALTH SERVICE.

No serious epidemic occurred in the Philippines during 1917, though cholera was present throughout the year in various Provinces to about the same degree as in the preceding year; 7,959 deaths occurred from cholera, of which only 8 were in the city of Manila. Inasmuch as the disease was controlled wherever it assumed large proportions it can not be said to have been epidemic throughout the islands. The increase in the number of artesian wells and the general introduction of a proper means of sewage disposal will go far to eliminate cholera from the islands. Two hundred and fifty-three deaths from smallpox occurred, and it became increasingly apparent that another general vaccination against smallpox was necessary, and that the effects of the general vaccination of 15 years ago

were generally wearing out. Eighty-one thousand vaccinations were made during 1917. Bubonic plague has not appeared in the islands since 1914. A slight increase of typhoid fever was apparent during the year, but this is attributed to improved methods of reporting cases. There was a diminution in the amount of diphtheria and measles.

Normal conditions prevailed in the administration of food and drug inspection.

Seventy-five new provincial cemeteries were approved, and one new hospital was opened in Albay. A new tuberculosis hospital was constructed at San Lazaro, and also a home for the aged and infirm. Thirty-nine additional nurses were distributed throughout the Provinces, and 56 new dispensaries were opened.

The most serious feature of the health situation of the island to-day is the spread of tuberculosis, and a general and drastic system of prevention of this disease is imperative here.

Special attention was paid to improving the method of caring for infants. Fifty-four additional women's clubs were organized during the year. District nursing was extended with excellent results.

The quarantine service has been particularly successful during the year, and this is all the more noticeable because of the epidemics of bubonic plague and other dangerous diseases in nearby ports, none of which gained an access to the Philippines from without.

#### DEPARTMENT OF FINANCE.

Hon. ALBERTO BARRETTO, secretary; Hon. MIGUEL UNSON, undersecretary.

The report of the insular collector of customs, printed as a separate document, calls attention to the unprecedented commercial prosperity in the islands. The total value of our foreign trade for the year amounted to ₱322,802,674, which is nearly 40 per cent greater than the preceding year. The increase is due to greater home production as well as to high prices of some of the commodities. This is the largest figure ever known in the islands. It left a balance of trade in favor of the islands of ₱59,614,552. Previous reports have shown the marked changes in our foreign commerce produced by war conditions, and the tendencies previously indicated continued in a marked manner. No new trade of course is recorded with the central countries of Europe, and even with the United Kingdom a decrease of 11 per cent in trade was noticeable. On the other hand, trade with Japan increased 62 per cent over 1916, and that with China also substantially increased. Trade with Spain declined 30 per cent, and that with Australia almost doubled. Considerable changes in the carrying trade of our foreign commerce were apparent this year. British vessels still carry the largest share of our goods, but this amounted to only one-third of the total as compared with 56 per cent in 1916. Japanese vessels on the other hand received almost double the value of trade carried by them in the preceding year, or approximately 25 per cent of the total. American vessels now rank third, about 22 per cent.

Imports into the Philippines in 1917 amounted to ₱131,000,000, an increase of almost 50 per cent over 1916, and constituting the greatest on record. Higher prices, however, play a considerable part in this remarkable increase. A large increase in the importation of manu-

factured cotton was divided between the United States, Great Britain, and Japan, the United States furnishing 70 per cent of the total, or an amount double that of the preceding year. The United States also furnished 85 per cent of the total importation of iron and steel accompanied by a continued decline in the importation of these articles from Great Britain. The exports of domestic products from the Philippines amounted to nearly ₱188,000,000, an increase of 39 per cent over the preceding year. The quantity of the export of copra increased, although prices were generally lower. With the extraordinary increase in the number of oil expressers in the Philippines it is obvious that the export of copra from these islands will in the future be uneconomic and unjustified. Gradually the local oil mills will absorb all the copra produced in the Philippine Islands, and under these circumstances the shipping companies should be induced to discontinue the export of copra, which occupies approximately four times as much space as oil which could have been produced therefrom. Although the production of coconuts has gradually increased in the Philippines, it is feared that the capacity of oil mills here will soon exceed the supply of raw material.

In response to the efforts of the Government to stimulate the production of embroideries during these times when the normal European production of embroideries had practically ceased, an increase of over 68 per cent is noted for 1917, as compared with that for 1916.

The total value of hemp of all grades exported during the year amounted to ₱93,615,559, which nearly equals the total value of the same article exported during the two preceding years. The average value, however, is considerably higher than before. The United States consumed more than one-half of the quantity exported.

Exports of maguey continued to increase in value, although in accordance with the expert opinion of Mr. H. T. Edwards, formerly director of agriculture of this Government and now special agent of the Department of Agriculture of the United States working in the Philippines, sisal will be found a more satisfactory fiber than maguey for binder twine purposes, and it is hoped gradually to replace the cultivation of maguey with that of sisal. Salt-water retting of maguey is meanwhile discouraged as far as possible, and the new stripping machines have proved an unqualified success.

The sugar production shows large increase in 1917, but owing to the difficulties of transportation only two-thirds as much was exported as in the previous year. A large increase of the sugar trade with China and Japan occurred in 1917.

Tobacco products were exported to the value of more than ₱14,000,000, a large gain over 1915 and 1916. Cigars show the greatest increase, the value exported being the highest on record here. Three-fourths of the output went to the United States.

Shipping shows a decline from year to year since the beginning of the European war and this, in the face of the increasing output of the islands, seriously restricts and hampers our commerce.

#### BUREAU OF INTERNAL REVENUE.

The total amount reported by the collector of internal revenue as having been collected during the fiscal year of 1917 was ₱39,937,370,



as compared with ₱30,731,638, an increase of about 30 per cent. Of this the insular Government's share during 1917 was ₱25,037,563. This great increase in the internal-revenue collections is further evidence of the general prosperity enjoyed at the present time by the Philippine Islands and is also in part due, particularly as to the revenues derived from the export of cigars, to the campaign of publicity conducted in the United States by the collector of internal revenue bringing home to the American public the advantage of the Manila cigars. Collector Rafferty rendered an interesting report of this work which has been published separately. Philippine leaf tobacco also began to attract the attention of the manufacturers in the United States, which resulted in an increased export from 20,683 kilos in 1914 to 3,283,607 kilos in 1917. There has also been a marked improvement in the manner in which tobacco is produced and cared for owing to recent acts of the Philippine Legislature and the regulations of the bureau of internal revenue.

The income tax for 1917 amounted to ₱1,182,888, as against ₱529,607 collected during 1916. The increase was due, of course, in part to the corresponding raise of the normal tax of 2 per cent under the new income-tax law of Congress. But these figures also demonstrate a better understanding of the income-tax law and a more efficient application to individual incomes.

The excess-profits war tax and other features of recent congressional legislation have not been applied to the Philippines, and the present condition of the Philippine treasury is so satisfactory that no immediate need for this is apparent, unless there is a call by the United States upon our resources in connection with war measures.

#### TREASURY BUREAU.

The report of the Secretary of Finance lays special stress upon the fact that the gold-standard fund as it then existed was insufficient to meet the enormous expansion in the circulation of money in the Philippine Islands in 1917. Accordingly the insular treasurer, under the provisions of the act of Congress of July 23, 1906, substituted with gold coins of the United States a portion of the silver certificate reserve fund to an amount not exceeding 60 per cent of the total reserve. Silver certificates were issued covered by gold deposited in the banks of the United States to the credit of the silver certificate reserve fund. The Philippine National Bank and the Bank of the Philippine Islands also increased their issue of notes to the total amount of ₱4,296,030. Abnormal conditions and the very high price of silver coming at the same time as the great increase in our currency circulation rendered it necessary for the insular treasurer to maintain a gold reserve considerably in excess of the maximum limit allowed by law. The silver certificates issued at the end of the year aggregated ₱70,137,150, as against ₱42,750,000 for 1916. The reserve fund consisted of ₱13,337,150 in silver pesos and of ₱56,800,000 in gold coins of the United States, the latter amount constituting 81 per cent of the total.

In September, 1917, there was a great shortage in subsidiary coins in circulation in the Philippines. The United States mint was unable to supply the local needs, and the situation became very embarrassing in and around Manila. Upon the suggestion of the Govern-

ment, the Philippine National Bank issued emergency notes of the denominations of ₱1, ₱0.50, ₱0.20, and ₱0.10, the total amount of this emergency issue being ₱2,700,000. The emergency having now passed, and coins in sufficient quantity coming from the United States, these emergency notes are being gradually retired as they come in to the bank.

At about the same time, when the scarcity of subsidiary coins occurred, the price of silver rose to 55 pence per ounce, raising the bullion value of the Philippine peso to ₱1.22. This was a temptation to many speculators to export our coins from the islands, but extra precautions were taken to prevent this evasion of the law and, at the same time, the insular treasurer was enabled to withhold from circulation many of the silver pesos and substituted therefor the ₱1 notes just mentioned, issued by the Philippine National Bank.

These unusual conditions and the consequent strain upon our currency system demonstrated a necessity for revision of our currency laws, which was undertaken and accomplished by the Philippine Legislature, by an act which was approved by the President of the United States just before the present writing. The principal features of this new law are that it grants authority to reduce the bullion value of the Philippine coins if that becomes necessary; to issue ₱1 notes; to consolidate the gold standard and silver certificate reserve funds in one single fund to be known as the currency reserve fund; and to abolish the present limit on the amount of gold coins which may be kept in the reserve.

The treasurer reports that the surplus in the treasury of ₱15,032,159 at the beginning of the year amounted to ₱24,404,683 at the end of the year.

### BUDGET.

In accordance with the provisions of the Jones Act of August 29, 1916, the budget system was definitely established in the Philippines at the beginning of the current session of the Legislature in October, 1917. The budget was prepared by the secretary of finance in consultation with the other members of the Cabinet, and the secretary of finance appeared personally before the two houses of the Legislature in joint session and read the message of the Governor General, conveying the budget, and explained its details. Both Houses adopted the budget as presented and referred it to the Committee on Appropriations. The appropriation bill for 1918 was passed in December, 1917, without increasing any items in the budget as submitted to them. It may thus be stated that the budget system is definitely adopted in the Philippines, and is expected to be of great benefit as a notable financial reform in the islands. It is hoped that, in connection with the submission of the next budget, a more detailed and comprehensive system of an executive program for the coming year may be submitted together with the budget in the form just adopted.

### DEPARTMENT OF JUSTICE.

Hon. VICTORINO MAPA, secretary; Hon. JOSE ESCALER, undersecretary.

Two vacancies occurred in the supreme court in the year 1917, owing to the resignation of Justices Moreland and Trent and, in their places, the President appointed Justice Thomas A. Street, a promi-

ment and valued member of the code committee, and Justice George A. Malcolm, dean of the College of Law, University of the Philippines. Subsequently, and in accordance with section 133 of the Administrative Code of 1917, two additional members were added to the supreme court. To fill these positions, the President nominated Justice Ramon Avanceña, formerly attorney general of this Government, and Justice Fred C. Fisher, a prominent member of the Manila bar. Section 138 of the new Administrative Code authorizes the supreme court to sit in banc and in divisions for the transaction of business and, in the latter case, four judges are necessary for a quorum. This arrangement of the work of the supreme court will greatly facilitate the transaction of business and result in a speedy clearing up of the congested calendar of that court. During the year 1917, there were 373 applicants for examination for admission to the bar, of whom 129 passed, only one of these being an American.

The code committee, by legislative enactment, ceased to exist on June 30, 1917, and during the seven years of its existence, the following work was completed and reported to the Legislature:

Administrative Code, Correctional Code, and the Code of Procedures; The Compilation of Royal Decrees, Ordinances and Regulations Concerning Public Lands During the Spanish Sovereignty; Index to the Philippine Reports; Comment and Translation of the Negotiable Instruments Act. The committee also submitted some amendments to the Penal Code and the Code of Civil Procedure. The only code which was not completed by them is the Civil Code, which was to have embodied the articles contained in the Civil Code and the Commercial Code.

Upon the appointment of Hon. Ramon Avanceña to the supreme court bench, the position of attorney general has become vacant and has remained so ever since. Mr. Quintin Paredes, the city attorney, was appointed solicitor general, and has been performing the duties of attorney general.

#### BUREAU OF PRISONS.

At the end of 1917, the prison population of the Philippines consisted of 6,941, of whom 2,495 were confined in Bilibid, 1,350 in provincial prisons, 1,201 in the Iwahig Penal Colony, and 599 in the San Ramon Penal Farm.

The penal colonists at Iwahig have observed good conduct throughout the year and no escapes and no crimes were reported, which is a striking justification of the principles there applied, by which the prisoners maintain their own guard and court for petty offenses.

In Bilibid Prison, the recently instituted prisoners' court continued with much success. A feature of the administration of Bilibid Prison was the establishment of a vegetable garden covering an area of 6 acres within the prison reservation, on which ₱250 to ₱300 worth of vegetables are produced monthly. It is believed that this system will eventually be adopted in provincial prisons as well.

#### DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES.

Hon. GALICANO APACIBLE, secretary; Hon. RAFAEL CORPUS, undersecretary.

The secretary of agriculture and natural resources invites attention to the following important activities undertaken by the bureau of agriculture during the year 1917:

(1) The vigorous food-production campaign under the direction and supervision of the department of agriculture and natural resources for the growing of food products to meet any possible shortage of foodstuffs due to the world war.

(2) The remarkable progress made in the establishment of cooperative rural credit societies among the small farmers of the islands.

(3) The complete elimination of the locust plague since the last quarter of the past year.

The agricultural production of the Philippines for 1917 in practically all of the staple crops exceeded in value the record of any one of the five preceding years. Except for the heavy rains, the weather was particularly agreeable throughout the year. Only one typhoon of importance occurred in the islands, passing through the northern part of Luzon. Partly owing to the rise in price, the total value of the nine staple products was ₱234,000,000 as against ₱181,700,000 for the preceding year. The amount of rice produced was 23 per cent over that of the preceding year; hemp was slightly larger in production though very much greater in value, as indicated elsewhere; coconuts increased 31 per cent in production; sugar a slight decrease; corn also a slight decrease in production, but a decided increase in value; tobacco, 14 per cent in excess of the production of the year before; maguey, 76 per cent, and a slight increase in cacao and coffee.

#### RINDERPEST.

In preceding reports of the undersigned, repeated mention has been made of the serious damage to Philippine agriculture by the rinderpest. The principal difficulties in dealing with this disease have been already commented upon at length. As previously indicated, immunization appears to be the best treatment of this problem, but the number of veterinarians in the Philippines is limited, and immunization proceeds slowly. In the Province of Pampanga, where the experiment was most satisfactorily tried, the total number of carabaos and cattle immunized during the year was 4,648, with a mortality from all causes of 187 or 4 per cent. At Iloilo, the total number immunized was 1,280, with a similar mortality of 4 per cent. Nevertheless, the rinderpest continued with virulence, the number of cases recorded during the year being 33,971 with 26,951 deaths as against 23,808 cases with 18,251 deaths during the preceding year. This can hardly be termed a public calamity, in view of the total number of cattle and carabaos in the Philippines, which amounted to about 1,786,000 in 1917. Nevertheless, it is a very serious question, and when one of our veterinarians discovers a sure specific for this disease he will have rendered a great public service to the Philippines.

#### RICE CULTIVATION.

Although greatly increased in production, the supply of rice is still far short of the annual consumption in the islands, and approximately one-third of the amount needed in the Philippines is annually imported from French Indo-China. The undersigned is convinced that, with practically no greater an amount of labor, merely by an improvement in the process of seed selection and a more satisfactory cultivation of the crop, a sufficient supply of rice can be pro-

duced in the Philippines to meet the annual needs. While the bureau of agriculture is earnestly at work endeavoring to improve the seeds employed by the farmers, it is believed that the problem could be more satisfactorily and promptly solved by adoption of the methods of village rice banks now in vogue in Java. As has so often been remarked, it is of vital importance to the Filipinos that they should produce their own food, and this no doubt will soon come to pass.

The administration of the bureau of agriculture is meeting with greater success year by year as the confidence of the farmers is gained. It is a genuine pleasure to announce that during 1917 the Philippines were entirely free from the locust plague and due acknowledgment is made to the cooperation of the provincial and municipal officials and Constabulary forces, who helped to bring this about.

The work of the food commission, presided over by the secretary of agriculture and natural resources, was successful and contributed in no small measure to the general increase in production throughout the islands.

#### BUREAU OF FORESTRY.

As has been noted in each one of recent annual reports there was an increase in 1917 in the receipts for forest products which amounted to ₱536,326. The spirit of the personnel of the bureau of forestry is excellent, and it is believed that this institution is a model of its kind in the Far East. It is nevertheless true that the salaries paid to American foresters are not sufficient to retain them in the service; the five Americans, who resigned in 1915, are now receiving more salary elsewhere, as are two of the former rangers of the bureau.

#### DEPARTMENT OF COMMERCE AND COMMUNICATIONS.

HON. DIONISIO JAKOSALEM, secretary; HON. CATALINO LAVADIA, undersecretary.

The secretary of commerce and communications in his report dwells upon the great improvement in commercial conditions here, and states that optimism has now replaced the tendency heretofore existing on the part of Manila business men to complain of hard times.

The only impediment to the commercial expansion of the islands is the decline in foreign shipping, which in terms of tonnage was 2,920,692 in 1917 as compared with 3,153,470 in 1916, 3,398,805 in 1915, and 3,802,117 in 1914. This decrease is coincident with the enormous production in the islands, thus creating an unfortunate congestion in the ports of entry. Similar conditions prevail in the coastwise trade where the aggregate tonnage shows a decline. The department of commerce and communications is endeavoring to stimulate the construction of small wooden vessels to meet the extraordinary conditions brought about by the war. The creation by the current Legislature of the bureau of commerce and industry, of which Mr. J. J. Rafferty, formerly collector of internal revenue, is the head, is expected to bring vitality to the commercial functions imposed by the organic act upon this department.

#### BUREAU OF PUBLIC WORKS.

Filipinization in the staff of the bureau of public works was noticeable in that the number of Americans has decreased from 81 in 1914 to 63 in 1915, and to 43 in 1917, while in the same period the

Filipino technical employees have increased from 24 to 79. The extreme concern felt in the bureau of public works in the rapid depletion in the force of engineers, who are intent upon entering the United States military service, has been elsewhere commented upon. Road construction was continued with even increased figure during the year, and a clear plan is being worked out for a system of national highways. The Manila North Road was continued to the farthest northern town of Bangui, and another road is under construction between San Jose, Nueva Ecija, and Imugen, Nueva Vizcaya, in order to give the isolated Cagayan Valley an outlet to central Luzon. In southern Luzon a road will soon connect the three Bicol Provinces. In the Visayas, the Provinces of Antique and Iloilo will before long be connected for wheel traffic. The cost of road maintenance increased from ₱508 to ₱592 per kilometer. This is mainly due to the destructive effect of heavy motor traffic. Two hundred and ninety-nine kilometers of surfaced roads were completed during the year, as against 368 in 1916. Two hundred and fourteen bridges were constructed, the largest of which is the Baroro Bridge in the Province of La Union, 198 kilometers long.

The secretary of this department makes a special plea for the development of docks, dockyards, and port works to meet the awakened commercial life of the Philippines.

In the matter of the construction of public buildings, a remarkable artistic development took place during the year under the supervision of Mr. Ralph Harrington Doane, the consulting architect. Architectural ornamentation has been added to the extremely plain and severe methods of construction of the past, and it is believed that the two new provincial buildings in Pangasinan and Ilocos Norte will be monuments of architectural beauty and models for the other provinces. Mr. Doane was ably assisted by Messrs. Arellano and Mapua, who were added to his staff during the year.

The number of motor vehicles registered during the year was 6,024 as compared with 4,835 in 1916. Recommendations are renewed for further amendments to the automobile law for the purpose of protecting our public roads, which in some localities are practically ruined by the heavy and unregulated traffic.

#### BUREAU OF POSTS.

Attention is invited to the fact that for the second succeeding year in its history the bureau of posts has been maintained upon a self-sustaining basis, and shows a profit in 1917 of ₱170,335.

In November, 1917, the Eastern Extension, Australasia & China Telegraph Co., ceased to operate its lines between Manila, Cebu, Iloilo, and Bacolod, which have been in operation for 20 years. Thus the bureau of posts now has a complete monopoly of the telegraph business of the archipelago, and is obliged to open new means of communication between the localities mentioned.

#### BUREAU OF SUPPLY.

The effects of war prices were severely felt by the bureau of supply during the year, and a new policy was instituted of purchasing on the basis of a year's supply instead of six months' as has previously been

the case. The volume of business handled by the bureau was nearly ₱19,000,000, as compared with ₱13,500,000 in the preceding year.

#### BUREAU OF LABOR.

This bureau comments upon the unusual number of strikes which took place in the year. There were 37 strikes in Manila alone. In general, these strikes were due to the rise in cost of necessities of life, and in most cases the strikers were met by the employers with a reasonable increase in wages. It is evident, however, that in many lines of activity wages will still have to be further increased throughout the islands.

#### BUREAU OF COAST AND GEODETIC SURVEY.

This bureau continued its very satisfactory plan of operations, but has suffered severely by the calling to the service of the United States Navy of about 50 per cent of the officers. In consequence of this, it has been necessary to lay off the *Marinduque* and the *Research*, both of which vessels were turned over to the insular government.

In conclusion it gives me great pleasure to express once more appreciation and gratitude for the zeal and efficiency of my colleagues and coworkers in the government and their unselfish and generous response to every call upon their energies.

Very respectfully,

FRANCIS BURTON HARRISON,  
*Governor General.*

The SECRETARY OF WAR,  
*Washington, D. C.*

# REPORT OF THE SECRETARY OF THE INTERIOR.

JANUARY 1 TO DECEMBER 31, 1917.

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,  
DEPARTMENT OF THE INTERIOR,  
*Manila, June 15, 1918.*

## INTRODUCTORY STATEMENT.

SIR: Pursuant to the provisions of section 22 of the act of Congress of August 29, 1916, commonly known as the Jones law, the Philippine Legislature on November 18, 1916, enacted Act No. 2666, otherwise known as the "reorganization act." Section 1 thereof provides for the organization of a department of finance, a department of justice, a department of agriculture and natural resources, and a department of commerce and communications, in addition to the departments of the interior and of public instruction; and also provides for the appointment in each department of an "undersecretary who shall perform such duties as may be assigned to him by the secretary of the department and as may hereafter be imposed upon him by law," and who "whenever a department secretary is unable to perform his duties owing to illness, absence, or other causes, or in case of vacancy in the office, shall temporarily perform the duties of said office." By section 3 of said Act No. 2666 the department of the interior was given "direct executive control, direction, and supervision of matters pertaining to the non-Christian tribes, the Philippine General Hospital, and the boards of pharmaceutical, medical, and dental examiners, and also of the executive bureau, the Provinces and cities governed by special laws, the Philippine Constabulary, and any other office or executive function that may hereafter be assigned to it by law."

On account of the prohibition contained in section 3 of the Jones law against the appropriation of public money or property for the use or support of any sectarian institution, the insular auditor, on November 29, 1916, announced his intention not to approve any payment of money in favor of religious or sectarian institutions. It became necessary, therefore, for the Government to take care of and maintain the tuberculosis patients, the invalids and indigent insane, and the orphans theretofore maintained by the Government at the various sectarian institutions. At first it was feared that those patients and orphans would have to be turned out and discharged from the institutions where they were being kept and maintained. But the Philippine Legislature at once voted the sum of ₱150,000 "to be disbursed, in the discretion of the secretary of the interior, in connection with the care and treatment of patients in the several hospitals of Manila and the Provinces, the maintenance of beds for advanced cases of tuberculosis, the usual dispensing of free medicine at the several dispensaries, the maintenance and care of invalids, orphans, and indigent insane, and in general for such other work or expenditures related to public beneficence and charity as said secretary of the interior may authorize and direct" (vide, Act No. 2671). There were, therefore, established under the direction of the undersigned and in accordance with said Act No. 2671, wards for the insane, for the tuberculosis patients, and for the aged and infirm, and a Government orphanage. The operations of those wards and of the Government orphanage are elsewhere described in this report.

On February 20, 1917, the Philippine Legislature enacted Act No. 2674, providing for the operation of the bureau of non-Christian tribes under the immediate executive authority, direction, and supervision of the department of the interior. The bureau of non-Christian tribes was created by section 22 of the Jones law. And on March 11 of the same year Act No. 2708 was enacted providing for the creation of the board of optical examiners by the secretary of the interior. Said board, however, was not created in 1917.



Under section 81 of the Administrative Code of 1917 the department of the interior is charged with the supervision of the board of optical examiners, which, as has been said above, was never created in 1917, and also of the board of dental hygiene. Chapter 24 of said code also gives the department of the interior supervision over orphans cared for and maintained at public expense in private asylums or institutions.

As regards the city of Manila and the city of Bagulo, the law (sec. 820 of the Administrative Code of 1917) provides that administrative supervision and control thereof shall be exercised by the department of the interior through the executive bureau. The charters of those cities, however, are replete with provisions indicating direct supervision by the secretary of the interior without any reference to the executive bureau. In view of such provisions the department of the interior has deemed it proper to exercise direct supervision and control over these chartered cities.

As may be seen, therefore, at the end of the year 1917, the department of the interior had executive control and supervision over the following bureaus and offices:

- |                                       |                               |
|---------------------------------------|-------------------------------|
| 1. Executive burcau.                  | 7. Board of dental examiners. |
| 2. Bureau of non-Christian tribes.    | 8. Charity wards.             |
| 3. Bureau of constabulary.            | 9. Government orphanage.      |
| 4. Philippine General Hospital.       | 10. City of Manila.           |
| 5. Board of pharmaceutical examiners. | 11. City of Bagulo            |
| 6. Board of medical examiners.        |                               |

The operations of the various bureaus and offices, including the city of Manila and the city of Bagulo, are elsewhere described in this report.

#### GENERAL STATEMENT OF POLICY.

In accordance with the system established by the reorganization act, the department of the interior has to perform two kinds of duties, rights, and privileges: (1) Those which are derived from its cooperation with other departments, and (2) those which are derived from its exclusive jurisdiction.

With respect to the first point, the department of the interior, having control and supervision over all provincial and local organizations throughout the archipelago, is the one called upon to cooperate with the other departments and to be, in some cases, the medium by which the respective policies of the latter and the measures adopted by them may become satisfactorily effective in our Provinces, cities, municipalities, and other small local organizations. Thus the department of the interior has to intervene in all measures adopted by the Government and its agents, the provincial governors and the mayors of the chartered cities have constantly been receiving instructions from this department, through the chief of the executive bureau, the bureau of non-Christian tribes, or directly, as the case may be, with a view to strengthening the spirit of mutual cooperation. They have been told, and are being told, that the Government of the Philippine Islands is a single entity, and that the existence of the various executive departments is only for the proper distribution of the works, and therefore the various chief executives of the different local organizations are the ones called upon to carry on, within their respective jurisdictions, the policy of the Government, whether the same comes directly from the department of the interior or from the other departments. They have been told, and are being told, that the existence of the cabinet answers the principle of unity in administration. To the chief of constabulary has pertained an important part of this work of mutual aid and cooperation.

For these reasons, during the whole year covered by this report, the chief executives of our provincial and local organizations, as well as the members of the insular police, have prosecuted the campaigns for national constructive works, directed by the central government, and we hope that this spirit of mutual cooperation and responsibility will become stronger and stronger as our officials and our people become acquainted with the present system of administration.

As regards the second point, or the duties, rights, and privileges of the department of the interior emanating from its exclusive jurisdiction, this department has followed within the bounds of executive powers and discretion given to it by our laws a consistent policy and a well-defined program of administration. Its principal points are as follows:

1. Pursuance of the establishment of fundamental conditions of peace and public order assuring a permanent stable government throughout the archipelago.

2. The extension and strengthening of civil government control in Mohammedan and pagan regions.

3. The cultivation and development of amicable and understanding relations between local representatives of government and the people throughout the islands.

4. The making of periodical trips of inspections for the purpose of personally acquainting with the conditions existing in the different Provinces of the islands.

5. The safeguarding of such grade of autonomy of the local governments as consistent with the power of control and supervision of the central Government.

6. The advancement of the non-Christian elements of our population to equality and unification with the highly civilized Christian inhabitants. This is carried on by the adoption of the following measures:

(a) Pursuance of the closer settlement policy whereby people of seminomadic race are induced to leave their wild habit and settle in organized communities.

(b) The extension of the public-school system and the system of public health throughout the regions inhabited by the non-Christian people.

(c) The extension of public works throughout the Mohammedan regions to facilitate their development and the extension of Government control.

(d) Construction of roads and trails between one place and another among non-Christians to promote social and commercial intercourse and maintain amicable relations among them and with the Christian people.

(e) Pursuance of the development of natural economic resources, especially agriculture.

(f) The encouragement of immigration into and of the investments of private capital in the fertile regions of Mindanao and Sulu.

#### GENERAL OPERATION AND ACTIVITIES.

From January 1 to 15, 1917, the undersigned was merely acting secretary of the interior, holding that office by virtue of the designation made by the Governor General in Executive Order No. 64, series of 1916, and exercising executive control and supervision over the bureaus and offices mentioned in said order.

The official operations of the reorganized executive departments of the Government may be said to have begun only on January 15, the date the several secretaries and undersecretaries were appointed.

The activities of the department of the interior have always been in keeping with the program of administration described in the preceding paragraph. The preservation of peace and public order throughout the archipelago has been the fundamental aim of this office and no efforts are being spared to attain this end, believing that with peace and public order assured no obstacle will be encountered in the work for the realization of a greater and progressive Philippines. It is with a certain sense of pride that this department is able to announce that work along this line has met with unqualified success.

The preservation of friendly relations between local officials and the people is another task which has always received the preferential attention of this department. The preservation of peace and public order is in the main due to the cultivation and development of amicable and understanding relations between local representatives of Government and the people. Local officials, be they elected or appointed, are made to understand that they are sworn to serve the best interests of the people, and that whenever and wherever they conduct themselves adversely to this principle they invariably receive censure and proper punishment. In this way the confidence of the people is won and mutual cooperation is the result, to the great advantage of the country as a whole.

This doctrine of mutual confidence and cooperation, however, can only be successfully preached and preserved when the authority responsible therefor is fully acquainted with the needs of the people and the conditions existing in the different Provinces of the islands. Thus the necessity of making periodical trips of inspection to the Provinces for the purpose. Provincial and local officials have also been directed to make similar trips within their respective

jurisdictions. It is by personal inspection, rather than through official reports, however accurate and complete the latter may be, that the higher responsible authority may have adequate information and consequent full understanding of the needs of the people and of the possibilities of the country for the purpose of adopting and executing a well-considered definite program. During the year 1917, the undersigned made two trips of inspection, one to the Department of Mindanao and Sulu and Palawan from March 18 to April 11, and the other to the large Province of Mindoro from June 11 to 16. The undersigned was not able to make more inspection trips on account of lack of funds for the purpose.

Of no less importance than the work above mentioned is the preservation of local autonomy consistently with the power of supervision of the central government as established by expressed intention of the Philippine Legislature. The undersigned has always respected the autonomy of local governments and officials, intervening only whenever the law so requires, or whenever the officials abuse their powers or neglect their duties to the serious detriment of the public interest and welfare.

As regards the works among non-Christians they are so varied in nature and in character that it is deemed proper to describe them together in a separate paragraph.

Besides the foregoing, the undersigned begs to invite attention to other minor matters in which routine works predominate, and are as follows:

In the first place, by virtue of his supervisory authority, the undersigned promulgates by department order such rules, regulations, orders, or instructions necessary for the proper government of the department, and secures the harmonious and efficient administration of the bureaus and offices under his control and supervision, and carries into full effect the laws relating to matters within his jurisdiction. During the year 12 department orders were issued.

In the second place, the undersigned has certain activities in connection with the affairs of the bureaus and offices under his jurisdiction. His intervention on bureau affairs is predicated on the theory that the several bureaus and offices under his jurisdiction are units or agencies of government constituting a correlated organization with the undersigned as its responsible head. Such intervention, however, does not go to the extreme of depriving chiefs of bureaus and offices of that discretion which properly belongs to them on matters pertaining to the jurisdiction of their respective bureaus and offices. Only in rare instances does the undersigned reverse or modify the activities of bureau chiefs.

Then there are other minor matters which under the law are required to be acted upon by the undersigned. Some of the more important ones are discussed below:

#### FILLING OF VACANCY IN MUNICIPAL OFFICES.

Section 2126 of the Administrative Code of 1916 provided for the filling of vacancies occurring in elective municipal offices. But the vacancies enumerated failed to include or contemplate the ones caused by the failure of an election, or by the declination of the officer elect, or by his death before qualification, or when there is no successor for any other reason. In view of such defect in the law, the Philippine Legislature, on March 11, 1917, enacted Act No. 2707, amendatory to the above-cited section of the Administrative Code. Thereunder any vacancy caused by failure to elect or when the officer elect declines to qualify or dies before qualifying, or there is no successor for any other reason, such successor shall, in the discretion of the secretary of the interior, be appointed by provincial board or elected at a special election convened by the Governor General. To avoid all excitements and troubles and the consequent expenses of a special election, the undersigned, on March 31, 1917, issued Department Order No. 1, directing that all such vacancies which were then existing and which might thereafter occur be filled by appointment by provincial board instead of by special election.

#### CONDEMNATION PROCEEDINGS.

Under the law the approval of the secretary of the interior is required before condemnation proceedings can be instituted. This law took effect on October 1, 1917, and from this date to December 31, 1917, four such proceedings were authorized by the undersigned.

## VARIOUS PROVINCIAL MATTERS.

The provincial and municipal laws as contained in the Administrative Code are replete with provisions requiring direct action by the secretary of the interior on numerous matters. Requests for authority to pay hospital fees, medical expenses, and salaries of provincial employees and laborers injured in line of duty; requests for authority to exceed the percentage limit prescribed by law for salaries of municipal officials and employees; requests for increase of salaries of municipal officials in excess of those authorized by law; requests for incurring overdrafts; provincial loans to municipalities; several details of members of provincial boards to perform ministerial duties; boundary disputes; appeals of chiefs of police; salaries of suspended officials, are among the provincial and municipal matters which were acted upon by the undersigned. For complete data regarding these matters reference is had to the operations of the executive bureau.

## WORKS AMONG NON-CHRISTIANS.

The underlying principles of the organic law for the bureau of non-Christian tribes, contemplate the advancement of the non-Christian or backward elements of our population to economic, political, and social equality and unification accordingly with the more highly civilized inhabitants of the regularly organized Provinces of the Archipelago. To quote the exact wording of the law:

"It shall be the duty of the bureau of non-Christian tribes to continue the work for advancement and liberty in favor of the regions inhabited by non-Christian Filipinos and to foster by all adequate means and in a systematic, rapid, and complete manner the moral, material, economic, social, and political development of those regions, always having in view the aim of rendering permanent the mutual intelligence between and complete fusion of all the Christian and non-Christian elements populating the Provinces of the Archipelago."

The final objective of the organization of the bureau is obviously the eventual discontinuance of the bureau of non-Christian tribes by the passing of its territory to the jurisdiction of the executive bureau as regularly organized provincial territory as rapidly as the people by advance in civilization shall have qualified for such autonomous provincial and local government.

To attain the ends desired works of civilizing influence have been continued among the non-Christian elements. These people are being taught and guided to improve their living conditions in order that they may fully appreciate the benefits of civilization. Those of them who are still given to nomadic habits are being persuaded to abandon their wild habitat and settle in organized settlements. They are being made to understand that it is the purpose of the government to organize them politically into fixed and permanent communities, thus bringing them under the control of the government, to aid them to live and work, protect them from involuntary servitude and abuse, educate their children, and show them the advantages of leading a civilized life in par with their civilized brothers. In short, they are being impressed with the purposes and objectives of the government of leading them to economic, social, and political equality and unification with the more highly civilized inhabitants of the country.

To assure the success of the work along this line, the organization and extension of public schools throughout the non-Christian territory have been continued. Recognizing the fundamental importance and predominant influence of public schools in the successful realization of the policy of the government in pagan and Mohammedan territory, they have always received preferential attention. By means of the public schools the Mohammedan, pagan, and other non-Christian elements of our population may be brought effectively and permanently to economic, political, and social status constituting a type of civilization uniform with that found in the Christian civilized communities of the regularly organized Provinces, thus bringing these discordant factors into harmony and homogeneity with the majority of the population of the whole country.

Side by side with the extension of the public schools is the extension of the public health service. Work along this line is one of the important factors of the extension and maintenance of government control throughout both Mohammedan, pagan, and other non-Christian territory.

Of no less importance than the work described is the extension of public works throughout the Mohammedan, pagan, and other non-Christian regions to facilitate their development and the extension of government control. Works

along this line have been carried on in conjunction with the department of commerce and communications.

Then we have the activities in connection with our natural resources. The pursuance of the development of natural economic resources, especially agriculture, properly belongs to the department of agriculture and natural resources. The department of the interior, however, has never failed to impress upon its subordinate officials the importance thereof. In the non-Christian Provinces it has always received the prime consideration of their officials as the same is considered essential to the carrying out of the purposes and objectives of the bureau of non-Christian tribes under whose jurisdiction those non-Christian Provinces are. Work along this line, however, is not possible of greater success unless the extensive territory comprised in those non-Christian Provinces and in the special Province of Mindoro can have laborers and capital sufficient to develop them. Accordingly, in conjunction with the department of commerce and communications, the department of the interior has carried on, through the executive bureau and the bureau of non-Christian tribes a continuous propaganda in Luzon and in the Visayas to induce not only immigration but also the investment of Philippine capital in agriculture in those places.

But it is not alone in the non-Christian Provinces that works among non-Christians are carried on with determined purpose. In the specially organized Provinces of Mindoro and Palawan and in the several regular Provinces where non-Christians are found special interest for the welfare of this element of population has been shown. And for the purpose of adopting a uniform general policy for the welfare and advancement of all non-Christian tribes, the director of the bureau of non-Christian tribes was "authorized and directed to exercise, in addition to the power, duties, and jurisdiction conferred on him by Act No. 2674, like jurisdiction, powers, and duties over the specially organized Province of Mindoro and Palawan, except such as are specifically vested by law in the chief of the executive bureau." (See Department Order No. 6, series of 1917.) In other words, for the purpose of uniformity of work among non-Christians, the director of the bureau of non-Christian tribes was made the advisor on matters pertaining to our non-Christian inhabitants.

#### LAW AND ORDER.

Officials charged with the preservation of peace and public order are loud in their statement that conditions of peace and continuing good order existed at the close of the year throughout the whole archipelago. Of course, there have been rare instances of local disorders, especially in the Mohammedan and pagan regions, and men there are who are prone to judge conditions of peace by such demonstrations. Thus the necessity of a statement of certain facts which should not be lost sight of in judging conditions of peace and public order in the Mohammedan and pagan territory.

From time immemorial the attributes of political and economic governmental authority have been exercised by the prelates and clergy of the Mohammedan Church in Sulu, Cotabato, Lanao, a large part of Zamboanga, and in those portions of the Provinces of Bukidnon and Davao which are inhabited by Mohammedans. Naturally, every feature of the extension of Government control, with its consequent tendency to reduce the authority and perquisites of the Mohammedan clergy and their patrons, the datus, and to limit their prerogatives to those corresponding to the clergy of other religious denominations lawfully operating within this country, is always made the subject of petitions and oral protests, oftentimes couched in the most vigorous and insistent terms, by the people to the authorities. The separation of church and state, always a complex and delicate undertaking, is a specially difficult matter, requiring the exercise of the utmost patience and tactful procedure by local officials in our Mohammedan territory, because of the lack of generally known precedent of such separation elsewhere in Mohammedan countries, the unparalleled devotion which still continues to the Mohammedan principles of religious faith as communicated by the clergy and the general lack of secular education and unprejudiced world knowledge.

The activities of Government control such as the public-land surveys and the implantation of the system of taxation, which are new to our Mohammedan territories, arouse suspicion as to their ultimate objects, and frequently it is only by the exercise of the utmost patience and reiterated statements of the Government's purposes and resulting advantages to the people that armed opposition is overcome and bloodshed avoided. Occasionally, however, religious fanaticism prevails and the agents of the Government are attacked, rendering

avoidance of bloodshed impossible, though fortunately these instances have been very rare.

In view of the still continuing devotion to the Mohammedan principles of religious faith, it is not reasonable to hope that the extension of Government control, the separation of church and state, and the implantation of the same system of taxation as in Luzon and Visayas may fully be accomplished throughout the vast Mohammedan regions of Mindanao and Sulu without recurring instances of violent opposition to the agents of Government in which the frenzy of the fanatically devout Mohammedan will compel bloodshed.

In judging public-order conditions, therefore, in Mohammedan territory as compared with Christian territory in these islands the foregoing facts should not be ignored, especially that the Government is pursuing a policy of complete separation of church and state which is unique in the government to-day of Mohammedans by Christians in the world.

#### EXECUTIVE BUREAU.

FRANCISCO ENAGE, chief; VICENTE MORENTE, assistant chief.

#### PERSONNEL.

Act No. 2668, which took effect on January 1, 1917, provided for one chief of the executive bureau and one assistant chief of the executive bureau. Mr. Jaime C. de Veyra held the position of chief until March 5, 1917, when he qualified as Resident Commissioner in the United States. Mr. Catalino Lavadia held the position of assistant chief until January 15, when he was appointed under secretary of commerce and communications. On January 27, 1917, Mr. Francisco Enage was appointed chief of the executive bureau, and on February 20 of the same year Mr. Vicente Morente was appointed assistant chief thereof. However, Mr. Enage did not assume office until February 23, 1917, and Mr. Morente until June 9 of the same year.

#### FUNCTIONS.

For the efficient performance of its work the bureau is divided into five divisions—the administrative, provincial, miscellaneous, translating, and records divisions.

The administrative division is in charge of the administration of the office, including the supervision over the entire personnel and the finances of the bureau and the care of the Ayuntamiento Building and of the office property and supplies. It has also charge of Government advertisements in contract newspapers.

The provincial division is in charge of financial matters, including the revision of real property assessments and the approval of provincial plantillas and special appropriations made by provincial boards.

The miscellaneous division has charge of political and legal matters, such as charges against provincial and municipal officials, boundary disputes between Provinces and between municipalities, and appeals of municipal councils and presidents from disapproval by provincial boards of any resolution, ordinance, or executive order. It has, furthermore, general supervision over all elections.

The translating division, as the translating office of the Government, does translating work for all the offices of the Government, including the Philippine Legislature.

#### TRANSLATIONS.

The total number of folios translated (a folio contains 100 words) during the year 1917 was 11,781. The schedule of charges collected by the bureau for translating work performed for other bureaus and offices is governed by Department Order No. 7, series of 1917.

#### RECORDS.

During the year 1917 there were recorded and mailed 175,787 different letters and indorsements, as compared with 174,631 recorded in 1916. In the same period 8,853 printed matters were addressed and mailed, as compared with 5,204 for 1916.

#### NUMBER OF PROVINCES, MUNICIPALITIES, AND TOWNSHIPS.

The total number of Provinces in the Philippine Islands on December 31, 1917, was:

Regular Provinces	32
Special Provinces	12

Total	44
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At the close of the year there were 779 municipalities, 18 more than the number reported last year, while the number of townships, 83, remained unchanged. During the year 10 barrios and 5 settlements were also organized.

#### PROVINCIAL AND MUNICIPAL GOVERNMENTS AND PERSONNEL OF PROVINCES.

There has been no change during the year in the organization of the provincial and municipal governments, except in the Mountain Province, where the position of third member of the provincial board was made elective.

All the provincial governors, except those of the Provinces of Cotabato, Lanao, and Sulu, Department of Mindanao and Sulu, are Filipinos. The Filipinization of the provincial treasury service was continued during the year 1917, as may be seen from the following comparison of figures for 1916 and 1917:

	1916		1917	
	Americana.	Filipino.	Americana.	Filipino.
Treasurers.....	12	21	7	27
Secretary-treasurers.....	6	5	5	6
Total.....	18	26	12	33

The plantillas of personnel for all the Provinces of the islands, except the Department of Mindanao and Sulu, have been approved with changes made necessary for reasons of economy.

With the concurrence of the director of civil service, the following schedule for chief clerks in the office of the provincial treasurer in the different Provinces has been adopted:

For first-class Provinces.....	per annum..	₱2, 400
For second-class Provinces.....	do.....	2, 160
For third-class Provinces.....	do.....	1, 920
For fourth-class Provinces.....	do.....	1, 680
For fifth-class Provinces.....	do.....	1, 440

Likewise the following schedule of salaries for secretaries of provincial boards has been adopted:

For first-class Provinces.....	per annum..	₱1, 800
For second-class Provinces.....	do.....	1, 620
For third-class Provinces.....	do.....	1, 440
For fourth-class Provinces.....	do.....	1, 260
For fifth-class Provinces.....	do.....	1, 080

#### SUPERVISION OVER PROVINCIAL AND MUNICIPAL GOVERNMENTS.

To be in close touch with the Provinces, the bureau secured from the Legislature the creation of two positions of provincial agents, the main duties of whom are to make periodical trips throughout the Provinces to inspect the offices of the provincial officials and to supervise the assessment work.

#### REAL PROPERTY ASSESSMENTS.

The revision of real property assessments in the Provinces of Albay, Antique, Bohol, Bulacan, Cagayan, Cavite, Ilocos Sur, Laguna, Misamis, Nueva Ecija, Rizal, and Surigao was completed during the year, while during the preceding two years only five Provinces were completed. There remain to be revised, therefore, only 15 Provinces.

Before the general revision of assessments the number of taxable parcels was 1,947,486, assessed at ₱298,907,970. At the end of the year 1917 the number of taxable parcels was 3,060,334, assessed at ₱584,360,550.

#### OTHER PROVINCIAL MATTERS.

The following matters have also received the attention of the executive bureau:

Fourteen thousand eight hundred and ninety-two bureau of supply requisitions and 1,663 bureau of printing requisitions were received and approved.

Nineteen thousand resolutions of provincial boards were revised, 32 of which were found illegal. About 60 certified copies of resolutions of municipal councils were sent for, and approximately 20 of these of doubtful legality were returned for annulment or amendment.

By authority of the secretary of the interior—

1. Twenty-two requests for authority to pay the hospital fees, medical expenses, and salaries of provincial employees and laborers who sustained physical injuries in line of duty were granted.

2. Six requests for authority to exceed the percentage limit prescribed by law for salaries of municipal officials and employees were granted.

3. Five requests for increase of salaries of municipal officials in excess of those authorized by law were granted and 16 denied.

4. Provincial overdrafts incurred for sundry purposes totaling ₱102,451.33 have been authorized.

5. Provincial loans to municipalities for various purposes amounting to over ₱40,000 have been approved.

6. Several details of members of provincial boards to perform ministerial duties were authorized.

Two hundred and forty requests for authority to collect and receive voluntary contributions for various purposes have been recommended.

#### SECOND LIBERTY LOAN BONDS.

With the approval of the secretary of the interior, the chief of the executive bureau addressed a circular letter to all provincial governments inviting them to invest in the liberty bonds part of the funds they had on deposit in the Philippine National Bank. Provincial officials were also urged to cooperate in securing subscriptions to the liberty bonds. The result was that the amount of ₱1,774,300 was subscribed to.

#### BOUNDARY DISPUTES.

During the year the executive bureau disposed of 15 boundary disputes by authority of the secretary of the interior.

#### CHARGES AGAINST MUNICIPAL OFFICIALS.

The following two tables will show the number of cases received and the nature and result of each:

	President.	Vice president.	Secretaries.	Councillors.	Total.	Grand total.
<b>Cases tried:</b>						
Officers suspended pending final decision	14	1	3	29	47	.....
Officers not suspended pending final decision	2	1	.....	10	13	.....
Cases pending final action by the executive bureau on Dec. 31, 1917	2	.....	.....	9	11	.....
<b>Total</b>	<b>18</b>	<b>2</b>	<b>3</b>	<b>48</b>	<b>71</b>	<b>71</b>
<b>Action taken:</b>						
Removed	4	.....	2	15	21	.....
Reinstated with warning or reprimand, suspended, or otherwise disciplined	11	1	1	11	24	.....
<b>Total</b>	<b>15</b>	<b>1</b>	<b>3</b>	<b>26</b>	<b>45</b>	.....
<b>Found not guilty: Reinstated or continued in office</b>	<b>1</b>	<b>1</b>	.....	<b>13</b>	<b>15</b>	.....
<b>Total number of cases disposed of</b>	<b>16</b>	<b>2</b>	<b>3</b>	<b>39</b>	<b>60</b>	.....
<b>Cases pending final action by the executive bureau at the end of the year</b>	<b>2</b>	.....	.....	<b>9</b>	<b>11</b>	.....
<b>Grand total</b>	<b>18</b>	<b>2</b>	<b>3</b>	<b>48</b>	<b>71</b>	<b>71</b>



	Neglect of duty.	Abuse of official position.	Violation of law, executive orders, and municipal ordinances.	Slander, disrespect, and use of bad language.	Perjury.	Ignorance and incapacity.	Malversation and breaches of trusts.	Bad habits and immorality.	Forgery and falsification.	Bribery and kindred crimes.	False arrest.	Extortion.	Robbery.	Total.	Grand total.
<b>GUILTY.</b>															
Presidents.....	11	10	4	4	.....	4	1	1	.....	.....	1	1	.....	37	.....
Vice presidents.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Secretaries.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	3	.....
Councillors.....	6	17	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	.....
<b>Total.....</b>	<b>17</b>	<b>28</b>	<b>17</b>	<b>5</b>	.....	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	.....	<b>1</b>	<b>1</b>	.....	<b>77</b>	<b>77</b>
<b>NOT GUILTY.</b>															
Presidents.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Vice presidents.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Councillors.....	.....	5	1	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	.....
<b>Total.....</b>	<b>1</b>	<b>5</b>	.....	<b>15</b>	.....	.....	.....	.....	<b>1</b>	.....	.....	.....	.....	<b>22</b>	<b>22</b>
<b>Grand total.....</b>	<b>18</b>	<b>33</b>	<b>17</b>	<b>20</b>	.....	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	.....	<b>1</b>	<b>1</b>	.....	<b>99</b>	<b>99</b>

As may be seen, the total number of municipal officials accused and tried was 71, as compared with 108 in 1916 and 164 in 1915. Of the 779 municipal presidents only 18 were accused, 15 of whom were found guilty; of the 779 vice presidents 2 were accused, of whom only 1 was found guilty; and of 7,052 councillors only 48 were accused, of whom 18 were exonerated.

#### CHARGES AGAINST PROVINCIAL AND MUNICIPAL CIVIL-SERVICE EMPLOYEES AND AGAINST CHIEF OF POLICE.

During the year 64 cases against provincial and municipal employees were disposed of, while 15 appeals by chiefs of police were decided by the chief of the executive bureau, by authority of the secretary of the interior.

#### INVESTIGATIONS BY MUNICIPAL COUNCILS.

Municipal councils are empowered to investigate charges of ineligibility against elective municipal officials and, with the approval of the provincial board, to declare their offices vacant or dismiss the proceedings. Persons dissatisfied with the decision of the municipal and provincial officials invariably submit their cases to the executive bureau. Ten such cases were handled during the year.

#### SALARIES OF SUSPENDED OFFICIALS.

The law provides that upon the subsequent exoneration or reinstatement of an official suspended from duty pending investigation of the charges against him the secretary of the interior may order the payment of all or part of the salary accruing during such suspension. Thirteen petitions for payment were received during the year, seven of which were granted.

#### APPEALS BY MUNICIPAL COUNCILS OR PRESIDENTS.

The law also provides for an appeal to the chief of the executive bureau where the municipal council or municipal president objects to the annulment by the provincial board of a resolution, ordinance, or executive order. During the year 34 such appeals were decided by the executive bureau.

## GAMBLING.

About the middle of 1917 the executive bureau, upon request of the secretary of the interior, instituted a general campaign against gambling. While no complete data are yet available showing the progress of the campaign in each province, yet from the reports on hand it may be concluded that much has been accomplished to lessen the evil.

## SPECIAL SENATORIAL ELECTION IN THE SIXTH SENATE DISTRICT.

The Philippine Senate having annulled the senatorial election held on October 3, 1916, in the sixth Senate district, the Governor General forthwith issued a proclamation calling a special election, to be held on May 5, 1917. Immediately after the election the chief of the executive bureau made a special trip to that district to hold an investigation of the complaints and rumors of fraud and other irregularities. The result of the investigation demonstrated that the election passed off quietly.

## GOVERNMENT ADVERTISEMENTS.

Under the law the executive bureau takes charge of Government advertisements. Contracts are now in force for the publication of Government advertisements in four newspapers—Bulletin, Cablenews-American, El Ideal, and La Vanguardia. During the year 996 different official advertisements were published.

## COOPERATION WITH OTHER BUREAUS.

On account of the similarity of the work of the bureau of non-Christian tribes and the executive bureau and to further the policy of the Government of bringing the territory supervised by that bureau under the same form of government as that existing in the other parts of the islands, an arrangement has been made whereby part of the work of said bureau is to be performed by the executive bureau.

As in previous years the executive bureau has continued to cooperate with the bureau of agriculture in the campaign for the eradication of locusts and rinderpest.

Similar cooperation has been lent to the director of coast surveys in securing from the municipal authorities geographical data.

*Financial statement.*

Total amount appropriated for the executive bureau for 1917\_\_\_\_\_ ₱213, 048. 00  
Budget charges:

Salaries.....	₱102, 030. 60
Wages.....	10, 458. 28
Traveling expenses of personnel.....	3, 804. 91
Freight, express, and delivery service.....	75. 70
Postal, telephone, telegraph.....	7, 957. 95
Illumination and power service.....	1, 462. 13
Miscellaneous service.....	24, 532. 71
Consumption of supplies and materials.....	6, 603. 15
Printing and binding reports, documents, and publications.....	1, 856. 95
Maintenance and repair.....	562. 12
Purchase of fixed assets (outlays).....	1, 569. 17

Total expenses..... 160, 421. 67

Reverted to insular treasurer..... 52, 626. 33

## Collections:

Fees for copying records and certificates.....	59. 50
Translation charges.....	3, 758. 10
Refund of salaries and wages.....	3, 464. 81
Reimbursement from the appropriation for the executive bureau for the services of the records division, property section, telephone operators, and custodian force.....	30, 000. 00

## Collections—Continued.

Money value of accrued leave.....	P12, 764. 65
Sales of equipment .....	219. 56
Sales of supplies.....	1. 97
Charges for cablegrams transmitted .....	4, 400. 63
Miscellaneous receipts.....	10, 965. 89

Total collected and deposited in the insular treasury..... 65, 635. 11

## BUREAU OF NON-CHRISTIAN TRIBES.

F. W. CARPENTER, director; VICENTE MORENTE, acting in the absence of the director from Manila office.

## PERSONNEL.

Pursuant to the provisions of section 702 of the Administrative Code, the Governor General on March 19, 1917, appointed F. W. Carpenter (governor of the Department of Mindanao and Sulu) director of the bureau of non-Christian tribes.

During the year there occurred 14 changes in important executive positions, as follows:

In the office of the Department secretary by the appointment of Teofisto Guingona, provincial governor of Agusan, vice Ponciano Reyes, appointed judge of the court of first instance. To the vacancy caused in the office of provincial governor of Agusan, Mr. Rafael Acuña was appointed.

The retirement of Charles R. Cameron, assistant to the Department governor and acting Department treasurer, and the promotion of H. B. Hughes from the office of provincial secretary-treasurer of Zamboanga to the newly created position of assistant secretary and acting Department treasurer. The vacancy caused by the promotion of Mr. H. B. Hughes was filled by the appointment of Ildefonso Coscolluela.

In the provincial government of Cotabato two important changes occurred, occasioned by the retirements of Gov. Bryant and Provincial Secretary-Treasurer Klar. The vacancies were filled by the appointment as provincial governor of Capt. C. B. Carter, of the constabulary, and the appointment by transfer of José Unson as provincial secretary-treasurer.

Gov. Causing of Davao was appointed auxiliary judge and Mr. Francisco Sales was appointed in his stead, while Mr. Juan Rodas was appointed provincial secretary-treasurer thereof.

Lieut. Col. H. Gilsheuser, of the constabulary, who performed the duties of provincial governor of Lanao, retired and the resulting vacancy was filled by the promotion of T. W. Coverston from the office of secretary-treasurer of the same Province. Mr. Elias M. Ataviado was appointed secretary-treasurer thereof.

Gov. Joaquin D. Luna of the Mountain Province was appointed one of the senators to represent pagan and Mohammedan territory, and Dr. Aquilino Calvo, formerly governor of Pangasinan and member of the Philippine Senate, was appointed governor of the Mountain Province.

Mr. José Martínez was transferred from the office of secretary-treasurer of the Mountain Province to that of provincial treasurer of La Union, and the resulting vacancy was filled by the appointment of Mr. Nicolas Encarnación.

Gov. Leo J. Grove, of Nueva Vizcaya, retired from the Philippine service and the resulting vacancy had not been filled at the close of the year.

Gov. Luis Lim, of Zamboanga, died almost immediately after his return from a long and exhausting field inspection, and Mr. Agustín L. Alvarez was appointed to fill the vacancy.

## GENERAL STATEMENT OF CONDITIONS.

The year 1917 has been noteworthy by reason of:

1. Marked advances which have been made in the extension and strengthening of Government control in Mohammedan and pagan regions.
2. The continued development of natural economic resources, especially agriculture, which has continued to be favored both by climatic conditions and market prices for products.
3. The acceleration of Filipinization of the personnel of government through the substitution of Filipino officers for American officers who have withdrawn

from the service of the Philippine Government to enter the National Army for active service in the war or private enterprise.

In summary the state of affairs uniformly throughout the territorial jurisdiction of this bureau is not merely satisfactory but in every way encouraging from the standpoint of the Government undertakings in promoting the general welfare and advance in civilization of the backward elements of population.

#### TERRITORIAL JURISDICTION.

The territorial jurisdiction of the bureau of non-Christian tribes comprises the Mountain Province, the Province of Nueva Vizcaya, and the Department of Mindanao and Sulu, and contains 45,152 square miles, about 40 per cent of the total area of the Philippine Archipelago.

#### POPULATION.

It is impossible accurately to state the increase in population during the year, but the most conservative estimate places the total population at 1,060,626.

#### PROVINCIAL AND MUNICIPAL ORGANIZATION.

In provincial organization the only matter of importance was the tentative readjustment of the boundaries between the Provinces of Bukidnon, Cotabato, and Lanao.

In the Province of Bukidnon three municipal districts were organized as municipalities, while in the Province of Lanao only one municipal district was organized as municipality.

#### PUBLIC ORDER.

Peace and continuing good order existed at the close of the year throughout the non-Christian Provinces. No band of outlaws exists in non-Christian territory at present.

#### POLITICAL CONDITIONS.

The only development worth mentioning in this connection is the action of the Governor General, under his statutory authority, making elective the posts of municipal president of the provincial capitals of Zamboanga and Davao. At the elections held apparently capable men were elected to office.

Political conditions may be stated as good throughout non-Christian territory, the term "political" being used in its most comprehensive sense. In the localities where a considerable Christian population is found there is naturally some agitation for the extension of the provisions of the general election law applicable to the office of provincial governors and representatives in the Legislature. This movement, however, is naturally limited by recognition of the fact that it is still necessary to wait a few election periods until the Mohammedan and pagan boys now attending public schools shall have become men of age to qualify as electors, and thereby give reasonable participation in electoral activities to their elements of the local population.

To a constantly increasing degree appointive municipal and other local government offices are selected by popular preference as expressed in public meetings, so far as practicable, and leading up to the formal elections prescribed by the election law, preparation for the extension of which to non-Christian territory is one of the specific objects of this office.

#### INSPECTIONS.

As frequent and extensive inspections as possible have been made during the year by the director of the bureau in person or by authorized representative. Provincial governors have, as a rule, continued to devote at least 20 days of each month to inspections and other duties in their territory outside their respective capitals, especially in the more remote and backward districts within their territorial jurisdiction.

#### CHRISTIAN, MOHAMMEDAN, AND PAGAN RELATIONS.

The relations between the Christian and non-Christian inhabitants have continued to improve throughout the year. Both Mohammedans and pagans

display an increasing confidence and disposition to closer social, political, and trade relations with Christians.

#### PUBLIC INSTRUCTION AND PUBLIC HEALTH.

These matters come under the jurisdiction of the department of public instruction and are perhaps discussed in the report thereof. But the part they are called upon to play in the successful realization of the policy of the Government in Mohammedan and pagan territory makes it advisable to mention their importance and influence in connection with the activities of the bureau of non-Christian tribes.

The extension of public schools and of public-health activities throughout the non-Christian territory constitutes one of the important factors in the extension and strengthening of Government control throughout the Mohammedan and pagan regions.

The public schools, constituting as they do the chief element of positive and permanent constructive value, are the fundamental means by which the Mohammedan and pagan elements of population may be brought effectively and permanently to economic, political, and social status, constituting a type of civilization uniform with that found in the Christian civilized communities of the regularly organized Provinces, thus bringing these discordant factors into harmony and homogeneity with the majority of the population of the whole country.

In general, the work of the public schools has been of a very high order, as judged by the results which are obvious upon inspection of the territory and comparison with conditions in previous years. The improvement in agricultural practice, in hygiene, and sanitation, in submission to Government control, in the social life of the people, and in political thought as expressed in countless ways, of which is typical the hearty singing in hundreds of Mohammedan and pagan schools of "Philippines, my Philippines," are impressive and supremely gratifying evidence of the efficiency with which the public schools are fulfilling their mission.

As regards public health, it may be stated that the situation in general has been good throughout the non-Christian territory during the year, and there is a noticeable improvement in both hygiene and sanitation, especially in the Mohammedan and pagan communities. In most of the Christian communities the situation is quite the equal of the most highly civilized communities in the regularly organized Provinces.

#### AGRICULTURE AND AGRICULTURAL COLONIES.

The discussion of these matters properly belongs to the department of agriculture and natural resources. However, they are so closely connected with the activities of the bureau of non-Christian tribes and so essential to the carrying out of the latter's policy that a statement herein is necessary.

Agricultural production in general throughout the non-Christian territory exceeded in 1917 that of any previous year. This is no less true regarding food crops than as to money or export crops. An important contributing factor to these results, especially as concerns the production of food crops, has been the public schools, which serve as the medium for the systematic direction and extension of agriculture, coordinated with the provincial governments, each of which is now provided with one or more qualified agricultural assistants.

Definite continuing efforts have been carried on during the year to bring to the attention of capitalists in Manila and in the United States the unrivaled opportunities for rubber plantations in south Mindanao and on the island of Basilan. As a result of the propaganda and in view of the success of the Basilan rubber plantation, California capitalists organized a corporation for a rubber plantation in Basilan.

Continuous propaganda have been carried on throughout the year in Luzon and in the Visayas to induce not only immigration but also the investment of Philippine capital in agriculture in Mindanao-Sulu. The great agricultural resources of that region and the comparative ease with which they may be developed can not be too strongly emphasized. Mindanao-Sulu no longer is a frontier attractive only to the adventurous; but has now progressed to a state warranting the favorable attention of the capitalist and homeseeker.

As regards the Cotabato agricultural colony, it has for its first and principal objective the determination of whether Christian and Mohammedan Filipinos might be brought to live harmoniously together in remote agricultural regions under conditions definitely promising complete eventual amalgamation. The complete success of the undertaking from this standpoint is conceded by those who at the beginning were most pessimistic and indeed adverse opponents of the plan.

The second and perhaps no less important objective of the colony's undertaking was the increased production of staple food products, an objective now definitely attained in so far as humanly possible for the number of individuals engaged.

The Cotabato agricultural colony plan stands a conclusive demonstration as offering the most effective instrumentality thus far devised for the attainment quickly of the economic, political, and social objectives of the Government, being the furthering of greater production of food staples and general increase in the national wealth, the complete homogeneity of the various regional groups of differing degrees and types of civilization; the development of the highest type of citizenship among the masses.

#### IMMIGRATION.

This matter properly belongs to the department of commerce and communications under whose jurisdiction the bureau of labor is. But the problem of civilizing the Mohammedans and pagans in Mindanao-Sulu has its most expeditious and positive solution in the movement under the Government direction to that territory of sufficient numbers of the Christian inhabitants of Visaya and Luzon, that a statement on the question in this report is deemed essential.

The question of immigration to the Mohammedan and pagan territories was undertaken by the government of Mindanao-Sulu in the latter part of 1916. The undertaking was without known precedent of comparably equal comprehensive scope and objectives, that it was considered necessarily as an experiment and consequently perhaps of uncertain success. It was believed, however, to be practicable in view of the success already had by the Government in its propaganda in securing families from the Province of Cebu for the agricultural colonies in the interior of the Province of Cotabato and center of that great Mohammedan region. Encouraging results were had from the beginning of propaganda and merited for the year 1917 the appropriation by the Legislature of ₱100,000.

"For aid to such inhabitants of the Provinces of Luzon and the Visayas as may desire to settle in Mindanao-Sulu, either in order to take advantage of the public land act by purchasing public land or acquiring the same under the homestead provisions of said act, or for the purpose of taking employment as laborers on private plantations or public works, including propaganda and transportation expenses and the delivery thereof."

Under this appropriation the work was continued through the year, and extended and the undertaking carried on in conjunction with the bureau of labor. Because of the great territory to which the immigration comes by commercial and other private-owned vessels, it is impossible to state even approximately the total number of immigrants who have entered Mindanao-Sulu by commercial and other private transportation during the year. The total number transported by Government vessels was 5,076.

#### FINANCIAL STATEMENT.

Following is a brief outline of the 1917 appropriation for the bureau of non-Christian tribes:

For expenditure under the immediate administrative control and responsibility of the bureau in personnel, supplies, etc.....	₱9,460.00
For current administrative expenses of the government of Mindanao-Sulu, including water transportation.....	297,077.50
For extension and maintenance of Government control in the following Provinces:	
Mountain Province.....	110,058.32
Nueva Vizcaya.....	21,301.00
Agusan.....	55,000.00
Bukidnon.....	45,000.00
Cotabato.....	90,000.00

Davao.....	₱60,000. 00
Lanao.....	60,000. 00
Sulu.....	40,000. 00
Zamboanga.....	35,000. 00
Grand total.....	822,896. 32

It is to be noted that of the appropriation of ₱297,077.50 for the Department of Mindanao and Sulu, ₱100,000 is a bureau of labor item, being for encouragement of immigration from Luzon and Visayas to Mindanao-Sulu to take up agricultural public land or for employment as laborers on public works and private plantations.

No efforts have been spared during the year to develop all available revenue resources of provincial and municipal government. The work of assessment for the real estate tax has been pushed in all the Provinces and concluded during the year in some. The collection of the per capita or cedula tax has been carried on systematically with gratifying results. The enforcement of the cattle registration, the internal revenue and other revenue-producing laws has been diligently pursued throughout the year. The results appear to be encouraging and in some instances noteworthy.

Provincial exchanges or trading systems are now organized in all the Provinces and the results have been uniformly good in all that were organized before the latter part of the year. Not only were there direct satisfactory financial results from the activities, but indirectly the collection of public revenues, especially the cedula tax, has been facilitated through affording at all times cash market with reasonable prices for local products.

#### RECOMMENDATIONS.

For the accomplishment of the purposes of the bureau attention is respectfully invited to the recommendations of the director thereof as contained in his report.

#### BUREAU OF CONSTABULARY.

Brig. Gen. RAFAEL CRAME, chief.

#### PERSONNEL.

During the year numerous changes in the staff of officers of the constabulary have taken place. From January 1 to April 11 the command of the constabulary was exercised by Brig. Gen. Herman Hall, of the United States Army; from April 11 to May 15, by Col. Marcus D. Cronin, also of the United States Army; and by Col. (now Brig. Gen.) Rafael Crame from May 16 to December 17 as acting chief, and from December 17 as chief thereof. All other officers of the United States Army were relieved, so that by the end of the year 1917 no Army officer was on duty with the constabulary.

The Filipinization of the commissioned grades in the constabulary was greatly accelerated during the year, 103 Filipinos alone having been appointed third lieutenants thereof. Because of the advantages offered by the retirement act and the opportunity presented by America's entrance into the world's war, 92 American officers left the constabulary, leaving 102 still in the service thereof. The total number of constabulary officers at the end of the year 1917 was 358, while the enlisted men numbered 5,505. This increase in the strength of the constabulary was due to the necessity of organizing six new companies for the Department of Mindanao and Sulu to replace the American Regular Army and the Philippine Scouts, which were withdrawn therefrom.

#### MUNICIPAL POLICE.

At the end of the calendar year 1917 there were in all 6,290 municipal policemen armed with 4,618 swords, 2,438 revolvers, and 75 other firearms.

The organization of the municipal police has in the past year continued to improve, and valuable service has been rendered by the institution in preserving the general peace of the country.

#### LAW AND ORDER.

Conditions of peace have been reported as excellent throughout the archipelago. The relations between the Christian and the non-Christian inhabitants, both in the Provinces of northern Luzon and in the Department of Mindanao

and Sulu, have been characterized by the entire absence of friction which could hardly be expected a few years ago.

Apart from the unimportant demonstration of dissatisfaction and unrest among a few Negritos inhabiting the mountains in the Province of Zambales, there have been no disturbances deserving of mention in the Provinces of central and southern Luzon, while in the Visayan Province the surrender of Otto de Roble and his followers freed those Provinces from outlaws. In the Department of Mindanao and Sulu two important campaigns were conducted against bodies of Moro fanatics who for some time had been displaying a hostile attitude toward the Government. These campaigns, one of which resulted in the taking of the Bayang Cota garrison, practically put an end to the opposition against the Government in that part of the country and placed the remote sections of Mindanao and Sulu under the influence of the Government.

#### COOPERATION WITH OTHER BUREAUS.

As in previous years, the constabulary has devoted a great deal of its time cooperating with other bureaus in the destruction of locusts, suppression of cholera and rinderpest, furnishing leper guards, repairing and building trails, roads, etc. At the request of the bureau of education officers and noncommissioned officers of the constabulary have been detailed to impart elementary military instruction to students of all the secondary schools in the islands. It is estimated that about 13,600 students are thus receiving instruction. A number of constabulary officers have also been detailed, at the request of the Philippine National Guard authorities, to assist in the instruction and organization of National Guard companies in the several Provinces of the islands.

#### FINANCIAL STATEMENT.

The following table clearly explains the financial operations of this bureau:

Available surplus last year.....	₱508. 00
Regular appropriation (Act No. 2672).....	3, 653, 359. 00
Deficiency appropriation (Act No. 2734).....	131, 400. 00
<b>Total appropriation.....</b>	<b>3, 758, 267. 00</b>
Reversion.....	29, 019. 98
<b>Total available.....</b>	<b>3, 756, 247. 02</b>
<b>Expenses:</b>	
(a) General, including salaries and wages.....	3, 453, 555. 27
(b) In connection with suppression of animal and plant diseases, including salaries and wages.....	188, 702. 53
(c) In connection with public health, including salaries and wages.....	68, 696. 22
(d) Aid to local governments.....	10, 957. 18
<b>Total.....</b>	<b>3, 721, 911. 20</b>
<b>Outlays.....</b>	<b>65, 186. 70</b>
<b>Total expenditures.....</b>	<b>3, 787, 097. 90</b>
<b>Appropriation available.....</b>	<b>3, 756, 247. 02</b>
<b>Deficit.....</b>	<b>30, 850. 88</b>

The deficiency has been brought forward to the year 1918.

#### PHILIPPINE GENERAL HOSPITAL.

Dr. FERNANDO CALDERON, director.

#### PERSONNEL.

During the year several changes have taken place in the personnel of the several departments of the hospital. The most important of these changes are the appointment, on February 12, 1917, of Miss Anastacia Giron as chief nurse and superintendent of nurses; the resignation of Otto Fredericks, on



March 1, 1917, as property and supply officer, and the appointment of Heracleo Mangay to succeed him; and the resignation of Drs. Rufino Abriol (Mar. 12), Carmelo Peñañor (Mar. 31), A. Bañes (Mar. 31), M. V. Arguelles (June 13), and Cesar Reyes (July 1) as members of the staff of residents. In the department of pharmacy several changes of personnel also took place. Misses Josefa Chuapoco and Mamerta Felizardo were appointed graduate student assistants, and Mr. Eugenio Quezada was appointed pharmacist in charge and Eduardo Castillo assistant pharmacist, while Mr. Alejandro P. Javier and Miss Angela Agrava resigned as graduate student assistants and Mr. Gonzalo del Rosario as assistant pharmacist.

#### ORGANIZATION.

The organization and policy of the general hospital has suffered no material change during the year 1917. The staff departments have remained the same, with a slight variation in their operations. Thus the chiefs of the several departments have been given complete control of the dispensary clinics, and they are directly responsible to the director for the efficiency and good conduct of such clinics. The dispensary clinics have been reorganized, and each clinic is now directly supervised by the chief of the department. Each clinic has now its own consultation room, and it is now possible to segregate the different patients coming for consultation. There is always a visiting physician or resident in the clinic to supervise the work, so that at no time is the clinic in the hands of the interne. There are fixed hours and days for the residents and visiting physicians to attend these clinics. In this way patients are able to consult the same physician for the same trouble if he so desires, and the physician can follow his cases throughout.

#### DEPARTMENT OF MEDICINE.

As in previous years, the services of this department are twofold—hospital and dispensary or outside service. The outside service consists in the treatment of patients in the dispensary who are not ill enough to justify their admission to the hospital. For the hospital service there are 84 free beds—34 for females and 50 for males—a limited number of beds for pay patients, and 14 beds for the employees of the institution. The total number of patients treated in the outside service during the year was 32,841, while 2,672 were treated in the hospital service.

#### DEPARTMENT OF SURGERY.

The activities of this department may be divided into five headings as follows: (1) Teaching, (2) hospital service, (3) dispensary work, (4) medico-legal service, and (5) research.

*Teaching.*—In connection with the school of nursing practical instruction was given to the students of the junior and senior classes in minor surgery, bandaging, general surgery, emergency surgery, and genito-urinary surgery.

*Hospital service.*—The patients admitted and treated in the department during the whole year numbered 2,340 in all.

*Dispensary work.*—The patients attended in the dispensary totaled 47,030 for the general surgery, gynecology, and genito-urinary surgery; while the dressings and minor operations performed totaled 42,005.

*Medico-legal service.*—During the year the department attended 71 medico-legal cases. The residents acted as medical witnesses in the court for said cases.

*Research.*—In connection with this activity, researches are made and articles thereon written and published. Last year seven articles were published from the department.

During the year this department performed 1,161 major operations, 1,535 minor ones, 2,568 dressings, 1,309 general anesthetics, and 876 local anesthetics.

#### DEPARTMENT OF OBSTETRICS.

The total number of patients attended by this department was 2,190, of which 1,177 were indoor and 103 outdoor. The total number of births was 1,245, of which 785 were indoor and 460 outdoor. The number of maternal deaths was 35, of which 32 were indoor and 3 outdoor; while the number of fetal deaths

was 156, 124 indoor and 32 outdoor. The residents and internes have made 1,846 visits, while the two visiting nurses have made 7,295 to the patients in the outdoor service.

#### DEPARTMENT OF PEDIATRICS.

The distribution of milk to the poor patients has been made by this department. During the year the number of cases attended was 11,890, while the number of admissions to the ward was 768.

#### DEPARTMENT OF EYE, EAR, NOSE, AND THROAT.

The function of the department is to attend its patients either in the hospital or in the dispensary, and to give instructions to the post-graduate students, the medical students, and the students of the school of nursing. During the year 881 patients were admitted and treated in the department. The total number of visits in the out-patient service was 14,892.

#### DEPARTMENT OF PHARMACY.

The space allotted to this department has been again enlarged. The laboratory on the second floor of the additional dispensary building has been turned over to the school of pharmacy. The offices formerly used by the physicians for government employees, as well as the toilet formerly used by the female patients, have also been turned over to the department of pharmacy.

The manufacturing pharmacy has been practically completed, so that at present numerous preparations, such as tablets, tinctures, infusions, emulsions, etc., are now being prepared in the pharmacy department. During the year the manufacturing pharmacy made 3,068 preparations.

The pharmacy department filled, during the year, 20,775 hospital preparations, 90,983 dispensary, and 772 other offices, or a total of 112,440 prescriptions.

#### DEPARTMENT OF PHYSICAL THERAPY.

This department is in charge of the X-ray examinations and treatments. During the year the total skiagrams taken was 1,835, including both hospital and out patients; while the total of the treatments made was 3,650. The total amount of money collected was \$2,542.50.

#### DEPARTMENT OF CLINICAL LABORATORY.

The work of the department last year comprised a total of 22,869 examinations—20,062 free and research, 2,261 official, and 576 private. This department is also in charge of the classes in bacteriology and chemical microscopy for students of the college of medicine and surgery, and undertakes investigations and research works either of its own initiative or upon the request of other departments.

#### FREE DISPENSARY DEPARTMENT.

This department is so arranged that there is always an attending physician or a member of the resident staffs in each clinic during clinic hours. (See Organization, supra.) During the year the total number of patients treated in this department was 115,579, as compared with 100,008 in 1916.

#### RECEIVING DEPARTMENT.

This department handles the ambulance calls and the emergency service. To regulate the hospital ambulance service, the secretary of the Interior, upon recommendation of the director of the Philippine General Hospital, issued Department Order No. 6 on July 9, 1917.

There are at present nine resident physicians detailed for 24 hours, between 8 a. m. and 8 p. m., and who are subject to call at any time of the day or night. Besides, the ambulance and assistant ambulance surgeons are constantly in the department.

During the year this department attended 27,608 patients, 345 minor operations, 1,735 dressings, and 275 other treatments. The total number of ambulance calls was 4,213.

## PAY PATIENTS' DEPARTMENT.

During the year this department had 1,482 pay patients.

## DEPARTMENT OF NURSING.

This department consists of 1 chief nurse and superintendent of the school of nursing, 1 principal, 1 assistant to the superintendent and 1 assistant principal, 1 dietist, 1 anaesthist, 1 assistant anaesthist, 16 supervisors, 36 head nurses, 9 graduate nurses, and 15 postgraduate students.

Due to the increasing number of patients in the hospital it became necessary for the authorities thereof to readmit 66 students who were among those who declared a strike in August, 1916. The need for the services of trained nurses is being felt especially in the Provinces; that many requests for graduate nurses were received last year.

## DEPARTMENT OF PROPERTY AND SUPPLIES.

This department handled during the year 2,969 orders for general supplies from the different departments of the hospital; 433 orders for drug supplies were filled at the drug storeroom and 567 orders for commissary at the commissary storeroom; 110 orders were placed at the bureau of supply and 1,903 placed by direct orders.

## DEPARTMENT OF ENGINEERING.

The hospital maintains this department to care for minor repairs and constructions as well as to take charge of the improvements of the yards and grounds.

## GENERAL SERVICE DEPARTMENT.

This department is in charge of the information service, the telephone service, messenger service, transportation service, watchmen service, gardening, sanitation, and miscellaneous-labor service.

## DEPARTMENT OF FINANCE AND RECORDS.

During the year there were 9,029 admissions and 8,939 discharges. The average daily number of hospital patients was 277. The total number of patients for all services of the hospital was 280,474, as compared with 241,514 for the year 1916.

The gross maintenance of each patient is ₱5.37 per day, as compared with ₱5.88 of the previous year. The gross operating expenses of the hospital during the year was ₱547,077.55, which was larger by ₱62,180.73 than that of 1916. The total earnings of the hospital were ₱74,689.87, which was ₱24,628.55 more than in the previous year.

Of the gross expenses of ₱547,077.55 the sum of ₱44,000 was contributed by the city of Manila. The net total available for the general hospital after deducting the probable receipts of ₱50,000 was ₱478,060. There would have therefore been a deficit had not the emergency board, on request by the director of the hospital, voted an additional sum of ₱10,000.

## BOARD OF PHARMACEUTICAL EXAMINERS.

## PERSONNEL.

The board of pharmaceutical examiners was, at the end of the year 1917, composed of Mr. Juan A. Caballero, chairman, Mr. Mariano Paredes, secretary-treasurer, and Mr. Rafael Carreon, member.

## ACTIVITIES OF THE BOARD.

During the year the two examinations required by law were held, resulting in the registration of 69 pharmacists.

There were issued, in accordance with law, 1 provisional certificate, 83 apprentice certificates, and 1 certificate for Chinese druggist.

## FINANCIAL STATEMENT.

The income of this board for the year 1917 exceeded the expenses by a few hundred pesos. The following table shows the difference between the income of the board and its expenses:

Income .....	₱1,800
Expenses .....	1,144

Difference, which represents a gain .....	756
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## BOARD OF MEDICAL EXAMINERS.

## PERSONNEL.

The board of medical examiners is composed of Dr. A. P. Goff, chairman; Dr. Fortunato Pineda, secretary-treasurer; and Dr. Ildefonso Villareal, member. Dr. Pineda was appointed to take the place of Dr. E. J. Pond, who resigned early in the year. Dr. Villareal was appointed on October 20, 1917, to take the place of Dr. Miguel A. Velarde, who resigned on that date.

## ACTIVITIES OF THE BOARD.

During the year the regular quarterly written examinations were held, resulting in the registration of 11 doctors, 35 licentiates in medicine, 2 "cirujanos ministrantes," and 21 midwives.

Besides the 11 doctors registered as a result of the examinations given 9 others were registered without examination in accordance with the provisions of Act No. 1632.

One registered physician was suspended from the practice of the profession for suffering "dementia precox," while another who had been under suspension for five years was again admitted to the practice of the profession.

## FINANCIAL STATEMENT.

The income of the board for the year 1917 exceeded the expenditures by over ₱2,000. The following table shows the sources of income as well as the items of expenditures:

Income:	
Fees from doctors .....	₱1,050.00
Fees from licentiates in medicine .....	1,950.00
Fees from the "cirujanos ministrantes" .....	40.00
Fees from midwives .....	210.00
Total .....	3,250.00
Expenses (salaries and fees):	
Dr. E. J. Pond .....	88.17
Dr. Fortunato Pineda .....	311.83
Dr. A. P. Goff .....	350.00
Dr. Ildefonso Villareal .....	30.00
Dr. Miguel A. Velarde .....	310.00
Total .....	1,100.00

## BOARD OF DENTAL EXAMINERS.

## PERSONNEL.

The board is composed of Dr. A. P. Preston, chairman; Dr. Miguel de la Concepción, secretary-treasurer; and Dr. G. R. Mateo, member. Dr. Preston was absent from March 16 to the end of the year, and the duties of the office had to be performed by Dr. Mateo as acting chairman.

## ACTIVITIES OF THE BOARD.

The two examinations required by law were regularly held, resulting in the registration of 44 doctors of dental surgery and 80 dental surgeons.

## FINANCIAL STATEMENT.

The income of the board for the year 1917 exceeded its expenses by over ₱2,000. The following table shows the sources as well as the items of expenditures:

## Income:

Examination fees.....	₱1,680.00
Registration fees.....	1,080.00
Renewal of registration.....	48.00
Total .....	2,808.00
Expenses (salaries and fees):	
Dr. A. P. Preston.....	62.09
Dr. G. R. Mateo.....	478.87
Dr. Miguel de la Concepción.....	179.03
Total .....	719.99
Total gain .....	2,088.01

## CHARITY WARDS.

Dr. Long, in charge.

## GENERAL STATEMENT.

Upon the passage of Act No. 2671 on January 10, 1917, appropriating the sum of ₱150,000 for charitable purposes the undersigned requested the director of health to submit an estimate of the cost of maintaining and caring for the tuberculous patients, the invalids and indigent insane, and the orphans, theretofore maintained by the Government at the various sectarian institutions, and upon the assurance that with reasonable economies it could be performed within the amount appropriated authorized the said director of health to take charge of the expenditure of said amount.

The work of transferring patients from the sectarian institution was at once begun, and between January 12 and 18, 1917, 61 patients were taken over and confined at San Lazaro Hospital. At the same time work has begun upon the construction of a tuberculosis ward at San Lazaro Hospital and the remodeling of the Casa Quinta at San Pedro Makati, which had been rented for the purpose of housing the orphans. Upon the completion of the work or remodeling the Casa Quinta the same was turned over to Dr. Jose Fabella, who was designated by the undersigned to take charge of the institution for orphans as physician superintendent thereof, together with the sum of ₱34,000 from the ₱150,000 appropriated as the estimated cost of running the institution until the end of the year. The operations of the Government orphanage are elsewhere described in this report. (See p. 47.)

The tuberculosis ward was constructed by the health service without the intervention of the bureau of public works or the bureau of supply and was completed on April 20. The building was constructed with the class of material used in the sanitary model houses. Later the construction of the aged and the infirm pavilion was intrusted to the bureau of public works. The building was completed on August 25, but owing to certain structural defects the same was not accepted until October 24.

On December 31, 1917, there were in the charity wards 437 indigent insane, 87 tuberculous patients, and 32 aged and infirm.

## FINANCIAL STATEMENT.

On September 19, it being apparent that the fund appropriated by Act No. 2671 would not be sufficient to carry on the works of the various wards and the Government orphanage, a request for ₱10,000 additional appropriation from the emergency board was made and granted. The sum of ₱7,313.59 was intended for the Government orphanage alone. The following table shows the appropriations for charity works and the expenses in connection therewith:

Appropriation (Act No. 2671).....	₱150,000.00
Allowed by emergency board (Res. No. 44, Oct. 6, 1917).....	10,000.00
Total available.....	160,000.00

Transfer to the control of the Government orphanage. ₱34,800.00  
7,818.59

₱41,918.59

**Expenses by Philippine health service:**

Salaries.....	5,135.54
Wages.....	15,418.96
Traveling expenses of personnel.....	386.53
Freight.....	48.46
Postal and telephone service.....	8.10
Illumination and power service.....	252.90
Miscellaneous service.....	50.00
Rental.....	150.00
Consumption of supplies and materials.....	66,055.42
Gratuities.....	6,615.35
Maintenance and repair.....	545.73
Outlays to building.....	12,255.54
Artesian well.....	1,816.48
Motor vehicles and accessories.....	72.89
Hand tools.....	51.50
Office equipment and furniture.....	8,048.88
Scientific instruments.....	40.09
Fire-fighting instruments.....	170.00
Miscellaneous equipment.....	164.78
<b>Total expenses.....</b>	<b>159,180.24</b>
<b>Total expenses.....</b>	<b>159,180.24</b>
<b>Reversions.....</b>	<b>809.47</b>
<b>Total.....</b>	<b>160,000.00</b>

**GOVERNMENT ORPHANAGE.**

**Dr. JOSE FABELLA, physician-superintendent.**

**CASA QUINTA.**

The Casa Quinta at Makati, Rizal, where the Government orphanage is located, was originally composed of three buildings of strong materials, built on a piece of land containing 8,600 square meters. Upon taking possession thereof, an artesian well was drilled, a house for the physician-superintendent constructed, the building was extended, and a nipa house built to segregate inmates having contagious diseases and to provide a home for the employees.

**PERSONNEL.**

On December 31, 1917, the personnel of the department numbered only 19. This number includes the physician-superintendent, 1 matron, 1 nurse-supervisor, 1 overseer for girls, and 3 teachers.

**NUMBER OF ORPHANS.**

The first group of orphans, consisting of 60 girls, was transferred from the Hospicio de San Jose on February 12, 1917. Later the 75 remaining in the institution were also transferred. Other orphans were then admitted from time to time so that the orphans in the orphanage once totaled 212. Of these 82 were discharged so that by December 31, 1917, the number of inmates in the institution was only 180.

**PURPOSE OF THE ORPHANAGE.**

As elsewhere stated in this report the Government orphanage was established by the department of the Interior pursuant to the provisions of Act No. 2671. The institution is intended "to take care of, to educate, to teach some useful art or trade to such orphans or destitute children as may be admitted to the institutions and finally to discharge such orphans or destitute children from the institutions whenever they can be made to start to make a living either by employment or by following the trade or industry which they may have learned

in the institution." (Sec. 3, Department Order No. 10.) But while the primary purpose of establishing such orphanage is to provide a home for the orphans and destitute children, and also a place where they can study some useful art or trade with a view to ultimately discharging them whenever they shall be able to start a living of their own, yet it has been found necessary to impose upon it the duty of receiving and caring for juvenile offenders sent to it by the courts of justice. The regulations of the orphanage, therefore, contain provisions which specifically refer to juvenile offenders which might be admitted in the institution.

#### SCHOOL.

The plan of instruction in the school in the orphanage is patterned after that of the public schools, with the difference that more time is devoted to industrial and trade works.

#### HEALTH OF INMATES.

At the time of the transfer of the orphans from the Hospicio de San Jose a great number of them was affected with skin diseases. Most of them have also decaying teeth so that it became necessary to contract for the services of a private dentist. Now, as a result of the physician-superintendent's efforts, the inmates are enjoying good health and are no longer the victims of skin diseases.

During the year two inmates died—1 boy and 1 girl.

#### FINANCIAL STATEMENT.

The following table shows the financial statement of the Government orphanage for the year 1917:

##### Appropriations:

Original allotment (Act No. 2671)-----	₱34,600.00
From emergency board-----	7,313.59
Transfer by public welfare board-----	2,309.86

Total available-----	44,223.45
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##### Expenditures:

Salaries and wages-----	11,893.10
Travelling expenses of personnel-----	412.74
Delivery charges-----	113.12
Postal, telephone, and telegraph service-----	195.88
Illumination and power service-----	859.81
Miscellaneous service-----	1,583.09
Rental of building and grounds-----	1,740.00
Consumption of supplies and materials-----	15,219.76
Repairs and additional construction-----	5,441.22
Equipment-----	4,264.73

Total expenditures-----	41,723.45
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Payment to Mary J. Johnston Hospital-----	2,500.00
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Total-----	₱44,223.45
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#### CITY OF MANILA.

##### ORGANIZATION.

The organization of the city of Manila and the duties of the different offices are defined in chapter 60 of the Administrative Code of 1917, to which reference is respectfully had. The characteristic feature of the government of the city is that it is vested in a mayor and a municipal board, the latter composed of 10 members elected by the people. The first election of members of the municipal board took place on June 6, 1916. Dr. Dominador Gomez was elected by his companions president of the board.

##### PERSONNEL.

Even after the reorganization of the city government Mr. Felix M. Roxas continued to hold the post of mayor of the city until January 15, 1917, when Dr. Justo Lukban was appointed thereto. After that changes, the most important one that took place during 1917, was the resignation of Member Tomas Mapua on October 12 and his appointment as assistant architect in the bureau of public works.

## MUNICIPAL BOARD.

The members of the municipal board at the end of the year 1917 were the following: Dr. Dominador Gomez, president, and Mr. Isabelo de los Reyes, Dr. Mariano Galian, Dr. Ramon Papa, Mr. Geronimo Santiago, Dr. Juan Nolasco, Mr. Martin Ocampo, Mr. Honorio Lopez, and Dr. Marcelo Eloriaga, members.

The successor of Mr. Tomas Mapua was not appointed until January 4, 1918. During the year the municipal board has held 104 regular, 10 special, and 9 executive meetings. Fifty-nine ordinances (Nos. 290 to 348 inclusive) and 52 resolutions were adopted. The number of communications received was 4,145 and the number sent was 3,738.

## MAYOR'S OFFICE.

The routine works of the office of the mayor are performed by the secretary and subordinate personnel.

During the year several differences have arisen between the mayor and the municipal board. This has been expected because of the fact that the mayor and the majority of the municipal board belong to different parties. Such differences, however, have been happily solved and both parties have always shown proper respect to the decisions and advice of their superiors on matters which are the subject of differences. And while such differences frequently occur, they do not, however, affect the spirit of unity and mutual cooperation which has always characterized the works of the mayor and the municipal board.

## FINANCIAL STATEMENT.

Under the law the collector of internal revenue is *ex officio* city assessor and collector of the city of Manila. The following table shows the financial operations of the city of Manila:

*City of Manila budget statement, fiscal year 1917.*

## Budget credits:

Revenue from taxation-----		P2, 213, 318. 71
Real estate tax-----	P1, 566, 912. 04	
Licenses and business tax-----	286, 818. 80	
Tuba taxes-----	P312. 50	
Municipal licenses-----	22, 697. 55	
Weights and measures	6, 361. 70	
Licenses-----		
Liquor-----	131, 537. 35	
Business-----	55, 728. 50	
Entertainment-----	3, 970. 00	
Peddlers-----	11, 106. 50	
Vehicle-----	33, 993. 00	
Dog-----	20, 218. 00	
Employment agen-		
cy, Act No. 2486	500. 00	
Sale of public vehicle		
equipment-----	395. 70	
Cedula tax-----	194, 200. 00	
Internal-revenue apportionment-----	89, 541. 96	
Franchise tax-----	75, 845. 91	
Incidental general revenue-----		200, 314. 39
Fines and forfeitures-----	180, 991. 84	
Fines and penalties-----		
Real estate tax-----	P20, 974. 22	
Tuba tax-----	43. 15	
Municipal licenses-----	229. 70	
Weights and meas-		
ures-----	5, 944. 30	
Cedula tax-----	26, 427. 00	
Court fines and		
penalties-----	125, 297. 96	
Administrative		
fines and for-		
feitures-----	2, 075. 51	
Miscellaneous incidental revenue-----		19, 322. 55



## Budget credits—Continued.

Earnings, operating income, and miscellaneous credits.....	₱8,894,928.06
Contribution from central Government.....	₱899,490.79
Income from rentals.....	63,477.98
Interest on investments and securities.....	68,107.76
Service income.....	2,499,082.65
Sales of fixed assets.....	14,362.55
Voluntary contributions from the public.....	40.19
Inventory adjustments.....	12,030.43
Receipts from loan from central Government.....	300,000.00
Miscellaneous receipts.....	36,857.18
Prior-year credit adjustments.....	1,467.53
<b>Total budget credits.....</b>	<b>6,308,559.16</b>

## Budget charges:

Revenue service.....	1,192,330.23
Expense of revenue collection.....	106,790.16
Operating expense of commercial and industrial units.....	1,085,590.07
Debt service.....	633,090.34
Interest on public debt.....	320,000.00
Payments to sinking fund.....	220,603.14
Repayment of loans.....	92,477.20
Central welfare service.....	3,605,589.84
Executive direction and control.....	89,398.06
Adjudication.....	50,135.66
Law and order.....	775,016.10
National defense.....	3,228.06
Public health.....	719,835.81
Protection against forces majeures.....	225,932.09
Other protective service.....	177,046.39
Public education.....	587,061.80
Public corrections.....	87,148.89
Public recreation.....	189,437.73
Public charities.....	151,580.63
Development of commerce.....	599,520.62
Outlays.....	1,108,233.63
Purchase of land.....	21,079.99
Purchase and construction of public works.....	953,987.51
Purchase and construction of equipment.....	133,166.13
<b>Total budget charges.....</b>	<b>6,589,284.04</b>

Increase in current surplus during the year.....	230,724.88
Add current surplus at the beginning of the year.....	1,022,416.20
Current surplus at the end of the year (see balance sheet).....	791,691.32

## CITY OF BAGUIO.

## ORGANIZATION.

The organization of the city of Baguio and the duties of the different offices are defined in chapter 61 of the Administrative Code of 1917, to which reference is respectfully had.

## PERSONNEL.

There have been several changes in the membership of the city council. The vacancy in the office of the vice mayor caused by the resignation of Mayor T. W. Dorrah on December 31, 1916, was filled by the appointment of Mayor H. M. Bankhead, United States Army, on February 28, 1917. Mayor Bankhead

resigned on May 15, 1917, due to his departure for the United States, and the position of vice mayor was filled ad interim by Mayor R. E. Fisher from July 7 to September 15, 1917. Mayor Fisher's departure for the United States in September again left the position vacant and Capt. J. H. Neff, commanding officer Camp John Hay, Baguio, was named as his successor on September 27, 1917, his appointment having been duly confirmed on October 22, 1917. Mayor G. S. Holmes, Philippine Constabulary, also tendered his resignation as councilman in August, due to illness and his departure for the United States. This vacancy was filled by the appointment of Mayor H. S. Upham, Philippine Constabulary, on September 27, 1917.

#### CITY COUNCIL.

The city council was at the end of the year 1917 composed of the following members: A. D. Williams, mayor and chairman; Capt. J. H. Neff, vice mayor; Mr. Pascual Pacis, Mrs. Francisco Yandoc, and Mayor H. S. Upham, councilmen.

The council has held 39 regular and 1 special meetings during the year. In addition to disposing of routine matters, 279 communications addressed to this body were acted upon and 9 ordinances (Nos. 186 to 194, inclusive) and 97 resolutions adopted.

#### ADVISORY COUNCIL.

There have been no changes in the membership of the advisory council and the vacant position has remained unfilled. The four Igorot members of this body are Cuidus, Piraso, Walang, and Pucay.

#### MAYOR'S OFFICE.

The work of this office has been conducted with the assistance of the city secretary and one clerk. No service differences have arisen between this office and the city council.

#### FINANCIAL STATEMENT.

The total amount of revenue derived from all sources amounted to ₱376,097.06, while the expenditures for the year amounted to ₱328,526.86, leaving an unexpended balance of ₱71,821.17. The expenditures are as follows:

Government finance.....	₱112, 976. 77
Administration of government.....	22, 908. 22
Protective service.....	14, 762. 25
Social improvement.....	19, 655. 26
Economic development.....	41, 915. 35
Loans and transfers.....	13, 594. 92
Real property.....	93, 555. 32
Equipment.....	9, 158. 77
<b>Total.....</b>	<b>328, 526. 86</b>

Respectfully submitted.

RAFAEL PALMA,  
Secretary of the Interior.

The GOVERNOR GENERAL, Manila.



# REPORT OF THE BUREAU OF NON-CHRISTIAN TRIBES.

JANUARY 1 TO DECEMBER 31, 1917.

DEPARTMENT OF THE INTERIOR,  
BUREAU OF NON-CHRISTIAN TRIBES,  
*Manila, April 26, 1918.*

SIR: I have the honor respectfully to submit the following report of affairs of the bureau of non-Christian tribes for the year ending December 31, 1917. Preparation of this report has been delayed because of difficulties in securing required data for the completed year, due to infrequent mail communication and the time necessarily required for the verification, correction, and compilation of statistics. In fact, it is not now possible to include in this report desired statistics as to revenue collections and other pertinent matters.

In this report are included all data which otherwise would form the report for the government of the territorial department of Mindanao and Sulu.

## ORGANIZATION.

This is the first annual report for the bureau of non-Christian tribes, as reconstituted pursuant to the act of Congress approved August 29, 1916 (the Jones law), the present organic act of the Philippine Government. The pertinent provision of this act is:

"SEC. 22. \* \* \* There is hereby established a bureau, to be known as the bureau of non-Christian tribes, which said bureau shall be embraced in one of the executive departments to be designated by the Governor General, and shall have general supervision over the public affairs of the inhabitants of the territory represented in the legislature by appointive senators and representatives."

Pursuant to the foregoing provisions of the act of Congress, the Philippine Legislature enacted Act No. 2674, approved February 20, 1917. This statute was reenacted as sections 701 to 705, Administrative Code of 1917, approved March 10, 1917, and constitutes the organic law of the bureau of non-Christian tribes, as follows:

"SEC. 701. CHIEF OFFICIAL OF BUREAU OF NON-CHRISTIAN TRIBES.—The bureau of non-Christian tribes shall have one chief, to be known as the director of the bureau of non-Christian tribes.

"SEC. 702. GOVERNMENT OFFICIAL DESIGNATED AS DIRECTOR OF BUREAU OF NON-CHRISTIAN TRIBES.—Whenever he shall deem it advisable, the Governor General may, with the approval of the Philippine senate, designate any civil officer in the service of the government of the Philippine Islands to serve in the capacity of director of the bureau of non-Christian tribes in addition to his other duties, but without additional pay.

"SEC. 703. UNDERSECRETARY SERVING AS ACTING DIRECTOR.—In case of the absence or temporary incapacity of the director of the bureau of non-Christian tribes, the undersecretary of the interior shall discharge the duties of acting chief of said bureau.

"SEC. 704. JURISDICTION OF BUREAU OF NON-CHRISTIAN TRIBES.—Through the bureau of non-Christian tribes shall be exercised the supervision and control of the secretary of the interior over the government of the provinces, municipalities, and other local political divisions of the Department of Mindanao and Sulu, the Mountain Province, and the Province of Nueva Vizcaya.

"SEC. 705. SPECIAL DUTIES AND PURPOSES OF BUREAU.—It shall be the duty of the bureau of non-Christian tribes to continue the work for advancement and liberty in favor of the regions inhabited by non-Christian Filipinos and to foster by all adequate means and in a systematic, rapid, and complete manner the moral, material, economic, social, and political development of

those regions, always having in view the aim of rendering permanent the mutual intelligence between the complete fusion of all the Christian and non-Christian elements populating the provinces of the archipelago."

Pursuant to section 702 of the Administrative Code, recited above, the Governor General on March 19, 1917, appointed the undersigned (governor of the territorial Department of Mindanao-Sulu) director of the bureau of non-Christian tribes, in addition to his duties as governor of Mindanao-Sulu. Absence from Manila on field inspections in the Provinces delayed the taking of oath of office as director of the bureau of non-Christian tribes until May 8, 1917. Prior to that date the undersecretary of the interior, as provided by statute, had immediate charge of its affairs.

In the interest of uniformity of administrative practice in the supervisory control of all provincial and municipal governments, and the greatest economy compatible with efficiency, the plan was adopted and has been followed of utilizing the personnel and facilities of the executive bureau for the administration of the bureau of non-Christian tribes. Under the direction of the undersecretary of the interior and through the courtesy of the chief and of the assistant chief of the executive bureau, the latter, by delegation of authority from and in the absence from Manila of the undersigned, dispatches all urgent matters and the current routine business of the bureau of non-Christian tribes. The correspondence and records of this bureau are prepared and the files kept by the executive bureau. In accordance with this arrangement there were included in the appropriation estimates and approved by the Legislature but two office employees for the bureau of non-Christian tribes—one clerk at ₱2,400 per annum and one clerk at ₱1,500 per annum. These employees are assigned to duty and, in fact, serve as members of the provincial division of the executive bureau. It has developed that these two clerks will not prove an adequate contribution to the clerical forces of the executive bureau to provide for the proportional share of work corresponding to the bureau of non-Christian tribes. Therefore, provisionally at least, more adequately to provide for clerical assistance, there has been created an additional clerkship, at a salary of ₱2,400 per annum, on account of the bureau of non-Christian tribes, which employee is also assigned, as are the two others, to the provincial division of the executive bureau. Aside from the saving in expense of personnel as compared with the considerable pay roll necessary were the bureau of non-Christian tribes organized as a complete, distinct bureau, the unusual plan of practical combination with and subordination to the executive bureau is in strict harmony with the underlying principles of the organic law, which contemplates the advancement of the non-Christian or backward elements of our population to economic, political, and social equality and unification, according with the more highly civilized inhabitants of the regularly organized Provinces which are under the immediate supervisory control of the executive bureau.

The final objective of this organization is obviously that of the eventual discontinuance of the bureau of non-Christian tribes by the passing of its territory to the jurisdiction of the executive bureau as regularly organized provincial territory as rapidly as the people by advance in civilization shall have qualified for such autonomous provincial and local government.

#### TERRITORIAL JURISDICTION.

The territorial jurisdiction of the bureau of non-Christian tribes, being the territory represented in the Legislature by appointive senators and representatives, comprises—

	Square miles.
The Mountain Province (subdivided into its extensive subprovinces of Apayao, Benguet, Bontoc, Ifugao, Kalinga, and Lepanto-Amburayan)...	6, 447
The Province of Nueva Vizcaya.....	3, 530
The territorial Department of Mindanao-Sulu, being the Provinces of—	
Agusan.....	4, 294
Bukidnon.....	3, 871
Cotabato.....	9, 320
Davao.....	7, 486
Lanao.....	2, 459
Sulu.....	1, 082
Zamboanga.....	6, 888
Total.....	45, 152

The total area of the Philippine Islands is 114,400 square miles, of which from the foregoing it appears that about 40 per cent is within the jurisdiction and responsibility of this bureau. This includes all the Mohammedan regions, except a small district in southern Palawan, and also the Provinces chiefly inhabited by pagans. The territorial extent will be noted to be greater than Switzerland, Denmark, Porto Rico, and Hawaii, or the States of Connecticut, Delaware, Massachusetts, Maryland, New Hampshire, and New Jersey combined.

*Population.*

Province.	Christian.	Mohammedan.	Pagan.	Total.
1. Agusan.....	30,000	-----	35,000	65,000
2. Bukidnon.....	21,500	3,000	41,800	66,300
3. Cotabato.....	6,837	107,205	35,402	149,444
4. Davao.....	33,194	7,803	61,803	102,800
5. Lanao.....	6,201	75,960	1,560	83,711
6. Mountain Province.....	8,503	-----	305,783	314,286
7. Nueva Vizcaya.....	16,000	-----	6,685	22,685
8. Bulu.....	2,756	120,000	-----	122,756
9. Zamboanga.....	58,650	45,000	30,000	133,650
Total.....	183,635	358,968	518,023	1,060,626

It is impossible accurately to state the increase in population during the year, either through the excess of births over deaths, it being obviously impossible as yet to establish an efficient, comprehensive service of vital statistics, or by reason of immigration from the densely populated and other regions of the regularly organized Provinces and of foreigners, the latter being almost exclusively Japanese who have gone to the hemp plantations of Davao in numbers approximating a net increase in this element of about 3,000 during the year. It is estimated that the increase by reason of immigration from the regularly organized Provinces during the year is not less than 25,000, a considerable part being the contract laborers and home seekers moving under the auspices of the Government and in response to the propaganda by private planters. Further discussion of this matter will be found under the heading "Immigration."

**GENERAL STATEMENT OF CONDITIONS AT THE CLOSE OF THE YEAR.**

The year 1917, to even greater degree if possible than the preceding year, has been noteworthy by reason of:

(a) Marked advances which have been made in the extension and strengthening of Government control in Mohammedan and pagan regions.

(b) The continued development of natural economic resources, especially agriculture, which has continued to be favored both by climatic conditions and market prices for products.

(c) The acceleration of Philipinization of the personnel of Government through the substitution of Filipino officers for American officers, who have withdrawn from the service of the Philippine Government to enter the National Army for active service in the war or private enterprise.

In summary the state of affairs uniformly throughout the territorial jurisdiction of this bureau is not merely satisfactory but in every way encouraging from the standpoint of results of the administrative undertakings of the Government in promoting the general welfare and advance in civilization of the backward elements of population. The only occasion for serious concern on part of responsible authority is in the matter of public order and the maintenance of Government control in those Mohammedan and pagan districts, but recently submitted to government, in which it is necessary to substitute young or otherwise inexperienced officers before the completion of the appropriate periods of training in such administration, by reason of the rather precipitate withdrawal of more experienced officials as already mentioned. This, however, is an unavoidable result of the demands of the Federal Government for experienced, well-trained officers for the command of troops and related important administrative service in the war or the attractive rewards of private business undertakings or service.

## LEGISLATION.

The senators and representatives, appointed by the Governor General pursuant to the provisions of the Jones law, constituting in the legislature the representation of the Provinces within the executive jurisdiction of the bureau, are as follows:

*Senators.*—Joaquin D. Luna, Mountain Province; Hadji Butu Abdul Baki, Mindanao-Sulu.

*Representatives.*—Juan Carifio, Rafael Bulayufigan, Pedro Aunario, Mountain Province; Wenceslao Valera, Nueva Vizcaya; Datu Piang, Pablo Lorenzo, Teodoro Palma Gil, Datu Benito, Isidro Vamenta, Mindanao-Sulu.

One Christian and one Mohammedan senator.

Five Christian, two Mohammedan, and two pagan representatives.

During the year 1917, in addition to the regular annual appropriations for current administrative expenses and public works and public improvements, the following acts passed by the legislature were of special reference of importance to affairs within the executive control of this bureau:

No. 2674. An act making certain provisions relative to the operation of the bureau of non-Christian tribes.

No. 2678. An act authorizing the Governor General to call by executive order an election for municipal president in any organized municipality within the Department of Mindanao and Sulu.

No. 2685. An act to reorganize the provincial board of the Mountain Province by creating the office of third member of said board and to abolish the office of industrial supervisor of said Province and transfer the duties thereof to the provincial governor.

No. 2722. An act to provide for the reservation of certain lands of the public domain on the island of Sulu, the usufruct thereof to be granted to the Sultan of Sulu and his heirs.

Of the foregoing the last-mentioned is the only one which appears to require explanatory comment. This law authorizing the reservation of certain lands of the public domain on the island of Sulu to be administered by the Government for the benefit of the Sultan of Sulu; his brother, the Datu Rajamada; the Dayang-Bayang Hadji Plandau, daughter of the deceased elder brother and predecessor of the present Sultan; and Putli Tarhata Atik, daughter of the deceased youngest brother of the Sultan, is intended to afford the means definitely and in due form by agreement with these heirs of the Sultan to extinguish their reversionary rights of sovereignty to lands in the Sulu Archipelago, thus finally by formal written agreement duly executed completely extinguishing in favor of the Government the former sovereignty of the Sultanate of Sulu, limiting that dignity hereafter to the status of the ecclesiastical head of the Mohammedans of Sulu. The Royal Princess Putli Tarhata Atik and her younger sister, Putli Sakinol, are being educated with a view to devoting their lives to the betterment of the position of the Mohammedan women of Sulu, and the income from the land to be reserved under the statute in question is expected to finance that work and eventually to be an endowment for public schools in the Sulu Archipelago.

## POLICY OF THE GOVERNMENT.

The only change under this heading during the year has been rather an accentuation of energies devoted to agricultural development, with especial reference to the production of food crops in anticipation of increasing difficulties in food supplies coming from foreign sources by reason of the increased demands upon and disturbances otherwise of the customary foreign food sources due to the war. In general the increased production of rice and other food crops in non-Christian territory is gratifying both by reason of planting of greater areas and generally favorable crop conditions as to rainfall and otherwise.

## PROVINCIAL AND MUNICIPAL ORGANIZATION.

In provincial organization the only matter to be reported is the tentative readjustment of boundaries between the Provinces of Bukidnon, Cotabato, and Lanao to give better adjustment of political divisions to natural topographic divisions imposed by the location of mountain ranges as ascertained in recently concluded explorations of previously practically unknown interior regions. As the territory added to Bukidnon and Lanao from Cotabato is very sparsely and in great part uninhabited, the action is chiefly important as to some future

time when these fertile plateaus and valleys shall attract the attention of capitalists desirous of investment in cattle raising and other branches of agriculture.

In the Province of Bukidnon three municipal districts have been constituted organized municipalities, viz, Impasugong, Maluco, and Talacag.

In the Province of Lanao the municipal district of Kolambugan has been constituted a municipality. There have been various minor changes in the municipal districts, townships, and settlements during the year, which are set forth in the accompanying reports of the respective provincial governments.

#### FINANCE.

The bureau of non-Christian tribes, like other administrative insular bureaus, is entirely dependent for funds upon appropriations by the Legislature from the insular treasury. The following in brief outline are the appropriations:

For expenditure under the immediate administrative control and responsibility of the bureau in personnel, supplies, etc.....	₱9,460.00
For current administrative expenses of the Government of Mindanao and Sulu, including water transportation.....	297,077.50
For extension and maintenance of Government control in the following Provinces:	
Mountain Province .....	110,058.82
Nueva Vizcaya.....	21,301.00
Agusan .....	55,000.00
Bukidnon .....	45,000.00
Cotabato.....	90,000.00
Davao .....	60,000.00
Lanao.....	60,000.00
Sulu.....	40,000.00
Zamboanga .....	35,000.00
Grand total.....	822,896.82

As in the regularly organized Provinces, appropriations for public schools and for public health were subject to the exclusive administrative control of the bureau of education and the bureau of health, respectively.

It is to be noted that of the appropriation of ₱297,077.50 for the Department of Mindanao and Sulu, ₱100,000 is, according to the practice adopted by the Legislature for 1918, a bureau of labor item, being for expenditure in encouragement of immigration from Luzon and Visayas to Mindanao-Sulu to take up agricultural public land or for employment as laborers on public works and private plantations. This was a new item, not appearing in appropriations for previous years. Deducting this item leaves for comparative purposes an appropriation of ₱197,077.50 for the fiscal year 1917, which is a reduction of ₱9,402.50, or almost 5 per cent in this expense (the Government of Mindanao-Sulu) as compared with the preceding fiscal year.

The appropriation for aid and current expense of provincial Governments was not increased, notwithstanding the great increase in territorial extent of effective Government control, the additional expense being met by increased local revenue collections.

The provincial and municipal budgets of the seven Mindanao-Sulu Provinces are practically uniform in practice with those of the regularly organized Provinces and municipalities. This uniformity has not yet been possible to extend to the Mountain Province and Nueva Vizcaya because the special Government acts providing for townships and municipalities, with distinctive financial as well as political organization, are still in force in these Provinces. There will be presented in due course proposed legislation correcting this situation by extending the Municipal Code of the Province of Mindanao-Sulu to the Mountain Province and Nueva Vizcaya.

No efforts have been spared during the year to develop all available revenue resources of provincial and municipal governments. The work of assessment for the real estate tax has been pushed in all the Provinces and concluded during the year in some, although final returns have not yet been received. The collection of the capitation or cedula tax has been driven systematically with gratifying results. The enforcement of the cattle registration, the internal revenue, and other revenue-producing laws has been diligently pursued throughout the year. The results appear to be encouraging and in some instances noteworthy.



Provincial exchanges or trading systems are now organized in all the Provinces and the results have been uniformly good in all that were organized before the latter part of the year. Not only were there direct satisfactory financial results from these activities but indirectly the collection of public revenues, especially the cedula tax, has been facilitated through affording at all times a cash market, with reasonable prices for local products.

It is regretted that it is not possible to embody in this report exact revenue and expense statistics for the year. These statistics will undoubtedly be set forth in customary detail in the reports of the insular auditor and insular collector of internal revenue, as will be customs collections in the report of the insular collector of customs.

Under the excellent practice adopted by the insular Government for the fiscal year 1918 appropriations of insular funds for the territory within the jurisdiction of this bureau are embodied under appropriate headings in the general appropriation act for the insular Government, the former practice of separate special appropriation acts for non-Christian territory being discontinued.

The development of provincial and local government revenues in the non-Christian Provinces generally has continued as during the preceding two years. Provincial governors and treasurers are entitled to special credit for these results.

Recommendations and further comment concerning finances will be found in the last section of this report.

#### PUBLIC INSTRUCTION.

The organization and extension of public schools throughout non-Christian territory during the year 1917 have continued, and to a practically corresponding degree have been the extension and strengthening of Government control.

The fundamental importance and predominant influence of public schools (agricultural and industrial) in the successful realization of the policy of the present government in Mohammedan and pagan territory have been discussed at length in my reports as governor of Mindanao-Sulu for the years 1914, 1915, and 1916. The facts stated in those reports are found to be equally true regarding the pagan regions of the Mountain Province and Nueva Vizcaya.

There is no other method than the extension and adequate provision of these primary and intermediate agricultural schools by which the Mohammedan and pagan elements of population may be brought effectively and permanently to economic, political, and social status constituting a type of civilization uniform with that found in the Christian civilized communities of the regularly organized Provinces, thus bringing these discordant factors into harmony and homogeneity with the majority of the population of the whole country.

The public schools, constituting as they do the chief element of positive and permanent constructive value to which all other activities of Government in non-Christian territory are supplementary or auxiliary, well merit the liberal appropriations which have been made during the past four years. If the Government desires to attain quickly and of a certainty its objective of bringing the Mohammedans and pagans of the next generation definitely on a basis of preparedness to fulfill the duties and meet the responsibilities of citizenship, to imbue them with a consciousness and acceptance of nationality as Filipinos, rather than as they now are considering themselves distinct and separate elements, susceptible of anti-Philippine and reactionary propaganda, the appropriations for public schools should be increased as may be necessary to provide for competent personnel and complete organization fully to occupy and Filipinize all non-Christian territory.

The most encouraging and indeed remarkable results have been attained in some districts by the public schools during the past year by their influence directly upon the adult members of both Mohammedan and pagan communities. The teachers in very many cases have merited the confidence and reliance not only of the parents of school children but also of the datos and headmen who generally are the officials of the recently organized local municipal district government.

In general, the work of the public schools has been of a very high order, as judged by the results which are obvious upon inspection of the territory and comparison with conditions in previous years. The improvement in agricultural practice, in hygiene and sanitation, in submission to Government control, in the social life of the people, and in political thought as expressed in countless ways, of which is typical the hearty singing in hundreds of Mohammedan and pagan

schools of "Philippines, My Philippines," are impressive and supremely gratifying evidence of the efficiency with which the public schools are fulfilling their mission.

School statistics are compiled for the school year which ends in March and not for the calendar year. These data will be found in the report of the Insular Bureau of Education.

Private schools have continued without noteworthy change in their activities during the year. There is to be noted, however, a distinct improvement and most commendable effort for higher standards of instruction in all these institutions, practically without exception.

The work of the mission schools carried on by the Belgian Roman Catholic missionaries in the Mountain Province has suffered severe handicap by reason of their financial resources having been seriously reduced and perhaps in some instances destroyed by the European war. The earnest constancy and self-sacrificing spirit displayed by these missionaries under the trying conditions resulting from the war are worthy of admiration and gratitude.

At Sagada, Bontoc, and other points in the Mountain Province as in Zamboanga and Sulu, Bishop Brent of the Episcopal Church has well-established mission work in the form of schools and other institutional enterprises directed to the improvement of the material well-being of the people. In these undertakings large sums of money have been expended from contributions made by Christian philanthropists in the United States. Modern, well equipped plants exist at Sagada and Bontoc which are the principal stations in the Mountain Province.

As a coordinate factor with the Government in the work of civilization throughout the territory within the jurisdiction of this bureau, I can not too strongly commend the work of Christian missions and philanthropy.

#### PUBLIC HEALTH.

The public health service, including hospitals and dispensaries, throughout non-Christian territory is entirely within the administrative control of the insular bureau of health. Accordingly statistics and other details must be sought in the report of the director of that bureau.

All public health activities appear to have continued to be carried on efficiently during the year and to form as in previous years one of the important factors of the extension and maintenance of Government control throughout both Mohammedan and pagan regions.

The financing of the public health service in Mindanao and Sulu is now on practically the same basis and similar practice as in the regularly organized Provinces, provincial, and municipal governments appropriating a definite portion of their respective revenues, 5 per cent of municipal general revenues, to which is added an equal amount of funds by the provincial government. This constitutes a fund which may be expended only for public health purposes and in accordance with the direction of the corresponding representatives of the bureau of health. The balance, and by far greater part, of funds for public sanitation, hospitals, etc., is provided by the Legislature from the insular treasury as appears to be the case in the city of Manila and the regular Provinces.

The acceptance and increasing popularity of modern medical and surgical treatment among both Mohammedans and pagans has continued throughout the year, except in those localities where vaccination against smallpox proved a failure, apparently because of the deterioration of the virus enroute from Manila to the remote points where it was used. This failure of vaccination in some localities was a serious discredit to the Government's health service, and even threatened disturbance of public order. The necessity of greater care and efficiency in the preparation and handling of vaccine virus needs no further comment. It is understood that the bureau of science, which is charged with the preparation of vaccine virus, is endeavoring to remedy past failures and that most of the recent vaccinations have been more successful.

From points in the Visayan Provinces both smallpox and cholera have entered Mindanao-Sulu during the year and have been combated efficiently and successfully as a rule.

In general the health situation throughout non-Christian territory during the year has been good and there is a noticeable improvement in both hygiene and sanitation, especially in the Mohammedan and pagan communities; in most of the Christian communities the situation is quite the equal of the most highly civilized communities in the regularly organized Provinces.

In the improvement of potable water supplies the most important project on which work has been carried on is that for the municipality of Jolo, which is now being modified and extended by reason of the withdrawal of the Army garrison from there and as result of the arrangement by which the excellent military water supply and partially completed plant have become available to the local government.

The construction of the municipal water supply of Zamboanga has now been completed by the connection of the distribution system with the permanent reservoir, thus affording an abundant and uncontaminated supply of water from the river, the intake being located in the mountains back of the town, above and beyond possibility of contamination from any human habitation. All arrangements for permanent control of the watershed have been made.

Work has been carried on in the installation and improvement of many small water-supply projects throughout non-Christian territory, but none of noteworthy individual importance.

Decided progress has clearly been made during the year in the education of the people as to the importance of potable water for drinking and domestic use.

The hospital ship mentioned in the preceding annual report was placed in commission during the year, but because of defective installation of motor engines and machinery had to be returned to the Engineer Island shipyard and shops for correction of defects. It is hoped to have this ship permanently in service within a few weeks, as it is urgently needed not only for medical and surgical relief but to strengthen Government control in the Sulu Archipelago and other islands lying between Zamboanga and Borneo.

#### AGRICULTURE.

Agricultural production generally throughout non-Christian territory exceeded in 1917 that of any previous year. This is no less true regarding food crops than as to money or export crops. An important contributing factor to these results, especially as concerns the production of food crops, have been the public schools, which serve as the medium for the systematic direction and extension of agriculture, coordinated with the provincial governments, each of which is now provided with one or more qualified agricultural assistants.

Increases in production of copra and abaca have been little short of phenomenal, and excellent prices ruled throughout the year; in fact, for abaca, especially for the higher grades of fiber, prices having been unprecedented.

Sustained systematic effort has continued throughout the year to increase production of food crops. The least degree of success in this regard has been in Davao, where the phenomenal production and prices enjoyed by hemp producers have rendered almost impossible effective work in undertaking to emphasize the importance of producing maize, rice, and other food staples. There has, however, been marked increase in the popular interest in cattle growing in Davao Province, which to some extent compensates for this.

Rinderpest has caused severe losses to cattle owners in southern Zamboanga and elsewhere to a lesser extent during the year. Surra has caused also losses among horses, especially severe in the central Cotabato Valley. Apparently in every instance these dangerous communicable diseases of domestic animals have been localized, and no severe losses have been suffered, except at the two points mentioned, and at these the total losses are inconsiderable as compared with losses reported in the regular Provinces.

The provincial government of Bukidnon, through its exchange or trading system, has organized under the corporation law to engage in cattle growing and other branches of stock raising. It had at the close of the year nearly 1,000 breeding cows and more than 100 mares. Arrangements have been made to secure bulls of the Nellore (Zebu) type, which are immune or very highly resistant to rinderpest, to be used for breeding with the cows which are the ordinary Philippine type. Selected Philippine and half-bred Arab stallions are provided for breeding with the Philippine mares. An abundance of first-class pasture watered by unfailing mountain streams is available. It is expected that this enterprise will produce a good type of beef and work cattle, highly resistant to rinderpest, and a good type of saddle and driving horse, for which the markets of the islands have great demand.

Definite continuing efforts have been carried on during the year to bring to the attention of capitalists in Manila and in the United States the unrivaled opportunities for the production of plantation Para rubber in south Mindanao

and on the island of Basilan. In this connection it was possible to secure a personal inspection of these regions by Editor in Chief Pearson, of the *India Rubber World*, who is recognized internationally as a high authority on the subject of rubber production, both jungle and plantation. Mr. Pearson subsequently published in the *India Rubber World* a series of articles during the month of July to December presenting in a distinctly favorable manner the opportunities for profitable investment in rubber plantation exploitation in the districts just mentioned, especially urging upon American capitalists the advantages of investment in the Philippines to avoid export duties and other extraordinary local taxation to which plantation rubber production in an increasing degree must be subject in the British and Dutch tropical colonies, which now are the principal sources of this highly important raw material for American factories and industries. This branch of agriculture undoubtedly constitutes one of the most profitable of the natural resources of the Philippine Islands, especially in the regions south of the typhoon zone.

The small plantations of Para and Castillioa now producing in Basilan and Davao mark the conclusion of the experimental stage, affording visible evidence convincing to the most skeptical as well as reliable data as to costs of exploitation and administration of such undertakings.

During the latter part of the year California capitalists organized a corporation and have already several hundred acres cleared for the planting of Para rubber on the island of Basilan, having decided upon this branch in view of the success of the Basilan rubber plantation, which has now reached the producing stage. Other individuals and groups of capitalists in Manila and in the United States appear to be considering seriously similar investment.

Continuous propaganda have been carried on throughout the year in Luzon and in the Visayas to induce not only immigration but also the investment of Philippine capital in agriculture in Mindanao-Sulu. A number of tentative beginnings have been made, which, if successful, may be expected to develop into extensive plantations by themselves and to attract others. These investments are chiefly in coconut and abaca planting and cattle raising.

I respectfully reiterate the following from my report as governor of Mindanao-Sulu for the year 1916, which is and will continue to be applicable, and I believe important constantly to impress upon the minds of the people of Luzon and Visayas:

"It is impossible too strongly to emphasize the relatively great agricultural resources of Mindanao-Sulu and the comparative ease with which they may be developed and made to contribute vast sums annually to the urgently needed increase in the general revenues and wealth of the Philippine Islands. Both patriotic interest and desire for personal gain should cause many thousands of Filipinos in Luzon and Visayas to emigrate to this most fertile region of Philippine territory, where certainty of abundant financial rewards to investment of capital and labor and the hastening of national economic independence and greatness afford most attractive assurances to the practice of civic virtues. Mindanao-Sulu no longer is a frontier attractive only to the adventurous, but has now progressed to a state warranting the favorable attention of the capitalist and home seeker."

#### PUBLIC ORDER.

Peace and continuing good order existed at the close of the year throughout the non-Christian Provinces.

No band of outlaws exists in non-Christian territory.

The following are the only instances of serious local disturbances of good order:

In March, 1917, a fanatic Joloano with several followers in western Sulu ambushed a small constabulary patrol, killing Lieut. George H. Ward and five soldiers and wounding four others, thereby gaining possession of six carbines, one shotgun, and one revolver. The local datus and law-abiding elements in the district at once gave assistance to the authorities, and within 46 days every member of the band of criminals surrendered unconditionally to the Government or was killed and all the firearms recovered without casualty to the Government forces.

In Lanao the datus of Bayan, influenced doubtless by the belief that the Government was no longer prepared to compel obedience to law and regulations because of the apparent reduction in its armed forces and changes in personnel, definitely refused to permit the cadastral survey of lands in their district, to

permit their children to attend the public schools, or to turn in to the Government the firearms they had been allowed to retain. Preliminary to this definite refusal they were found strengthening their cota, which was famous throughout central Mindanao for its apparently strategic position and popularly supposed impregnable strength. After several conferences with these datos they were given 24 hours within which to turn over to the Government all their firearms, destroy their cota in so far as its constituted a fortification, withdraw their opposition to land surveys, and return their children to the public schools. They definitely refused to comply with these requirements, and with their followers withdrew inside the cota and defied the Government. The cota and the datos were destroyed.

After some hours of destructive fire on the cota by the Government forces the datos and several of their followers communicated a desire to surrender, and after coming out of the cota and gaining proximity to the officers and Government forces, went amuck in a desperate effort to kill the provincial governor, the provincial commander of constabulary, and other officials. In the resulting mêlée the datos and panditas who led the rush were killed; although some were slightly wounded, none of the Government officials were killed, this having been due to the wise precautions which had been taken compelling the people coming out of the cota not to bring with them their firearms. This case of determined refusal to submit entirely to Government control had attracted great interest throughout the entire lake region of central Mindanao. As a consequence the reduction of the cota was witnessed by a large number of representative people, including many datos who, unwillingly but more wisely than the datos of Bayan, had recently submitted to government and gradually abandoned their pretensions of local sovereignty and independence in local government. The prompt and conclusive result, with the practical extinction of the recalcitrant Bayan datos, was of tremendous effect in the strengthening of Government control throughout the region.

In view of the undoubted strength of the Bayan cota as a defensive fortification which could not be reduced by rifle fire and occupied by the Government forces without probably severe casualties to the latter, and the constabulary being equipped with no firearms of character of artillery of any sort, the Army was called upon and furnished a detachment of 40 Philippine Scouts under Second Lieut. Morris B. Herbert, with two mountain-artillery cannon, Vickers-Maxim, caliber 75 mm., with shrapnel and high-explosive shells. These guns were invaluable in the operation. Maj. Paul Beck, Philippine Scouts, with about 200 officers and men from his battalion at Camp Keithley, responded promptly to a request to stand by as reserve, but it was not necessary for them to take direct part in the operations.

Lieut. Paulino Reyes, Philippine Constabulary, with several men from his company, in the course of the shelling of the cota, attempted to force an entrance and was wounded, though not fatally, by a rifle bullet from within the cota; several of his men were also wounded, one fatally.

At the mountain station of Kidapawan, near the divide between the Cotabato Valley and the Gulf of Davao, an effort was made by about 100 Maguindanaos (Cotabato Moros), armed with kris and lances, to surprise the station and capture the firearms. The leader of this band was an individual who was popularly credited with communication and guidance from the spirit world. One revolver shot fired by the station commander, which wounded the foremost member of the band, who was not the leader above mentioned, instantly dispersed the party. Most of the responsible members of this movement have been arrested by the local Maguindanao officials and datos and turned over to the courts for trial.

In the more inaccessible mountainous regions inhabited by pagans the Government, because of lack of personnel, has not yet been able to establish stations affording police control fully to prevent the occasional occurrence of raids between small groups of individuals in accordance with the traditional practice of these peoples. Such raids, however, were more infrequent and fewer casualties appear to have occurred than in preceding years.

In the Sarangani district it has been necessary to do extraordinary patrolling and pursue groups of mountain pagans who, following their traditional practice, have occasionally made raids upon each other and more rarely committed depredations against property in the lowland. These people, who have never been brought under Government control by the Spanish or American military governments, do not offer a serious problem, except requiring probably two

or at most three additional constabulary stations effectively to control them. The constabulary is in full charge of this district and has taken up 16 firearms during the year. There are probably about 50 firearms still in the possession of these mountain people, being, however, old muskets and other obsolete arms for which there is no ammunition except the crude powder and bullets the people themselves are able to make. These people (Bilans) generally are not hostile toward nor attack the representatives of the Government; in fact, they frequently ask permission from the constabulary commander (and can not ordinarily comprehend the reason for its refusal) to make a raid on or to kill some person or group of persons considered enemies, or for other reasons according to their traditional customs.

Otherwise crimes against persons and property and other violations of law during the year have been purely individual acts meriting no special comment. Cattle stealing has been infrequent except on the island of Jolo, where it appears always to have been a customary activity under the protection of some datus and other individuals of personal prestige. The constabulary, the provincial and local governments, and the law-abiding elements of the population are making a sustained systematic effort to suppress this criminal activity, and with encouraging results.

The more or less secret efforts of the Mohammedan priests to exercise jurisdiction over religious offenses which at the same time are infractions of the laws of government, being minor crimes and misdemeanors, occasion considerable demand upon the attention and tact of Government officials, not infrequently because abuses committed by the priests through their exactions in the form of fines and other monetary penalties threaten to, and if not adjusted by the Government would, occasion disturbances of public order. This situation can only have definite remedy through the instruction and general enlightenment of the masses of the people, for which the public schools are diligently working; meanwhile the situation must be controlled by just and wise public administration.

The constabulary of the Mountain Province is organized on the basis of a separate unit for each subprovince, the commander reporting as a provincial commander (formerly termed "senior inspector") directly to constabulary headquarters at Manila. The Province of Nueva Vizcaya for constabulary administration constitutes a provincial unit. The responsibility of constabulary for public order in the Mountain Province and Nueva Vizcaya is complete, as in the case of regularly organized Provinces.

The seven Provinces of Mindanao and Sulu, which are under the jurisdiction of the bureau of non-Christian tribes, together with the two adjacent regularly organized Provinces of Misamis and Surigao, constitute the constabulary Department (formerly district) of Mindanao. Responsibility for the operations of constabulary within the seven Provinces of Mindanao-Sulu continues, as formerly, with the department governor.

There have been many changes in Mindanao-Sulu constabulary personnel during the year. Col. Peter E. Tranh, United States Army, who had commanded the constabulary of the Department with great distinction during the earlier period of constructive work since the latter part of 1914, was relieved and returned to the States in March, 1917, in obedience to orders requiring him to return to the Army. He was succeeded as Department commander by Col. John W. Craig, an Army officer of ability and much experience in the Philippines and in constabulary work. However, Col. Craig was relieved May 9, 1917, under orders to resume duty with the Army (shortly after the entry of the United States in the European war). Col. Ole Waloe, Philippine Constabulary, relieved Col. Craig as Department commander and has since continued. Col. Waloe had service as a commissioned officer of constabulary since December, 1901, and almost entirely in Mindanao. He is the first civilian constabulary officer to command the Department (district) of Mindanao, and already has well justified his selection for this difficult post.

In addition to the changes of Department commanders of constabulary there have occurred during the year very serious losses in constabulary personnel by reason of the withdrawal of American officers for service in the Army and return to private life. During the year 80 per cent of the provincial commanders have gone. Nineteen company and station commanders have likewise left the service and many junior officers of two years or more experience in active constabulary work. These American officers have, as a rule, been relieved by Filipino officers. The latter in most cases were young both in years and experience. They have, however, acquitted themselves well in the very difficult

and trying duties and responsibilities which they have been required to undertake without the period of preliminary training in subordinate capacities which, under more normal conditions in past years, has been the regular course of preparation for advancement in grades and responsibilities.

In addition to the practically complete reorganization of constabulary personnel in the more responsible positions within the Department, the situation has been rendered more difficult by the radical step which has been decided upon in accordance with the policy of the Army to withdraw all its garrisons and troops from Mindanao-Sulu, except one battalion of Philippine Scouts (two companies of Bicolis and two of Moros) at Pettit Barracks, Zamboanga, which now is the only Army post south of the island of Luzon. The Army posts in Mindanao-Sulu determined upon for abandonment are Ludlow Barracks (two battalions) at Parang, Cotabato; Augur Barracks and Asturias (two battalions) at Jolo, Sulu, Camps Keithley, and Overton (two battalions) in Lanao. Anticipating these withdrawals of troops and abandonment of Army posts, the Governor General decided upon and authorized the organization of 6 additional companies of constabulary of 50 men each for assignment in Lanao and Sulu. These companies have been organized, concluded their preliminary training, and are now regularly on duty at stations.

The insistent rumors, doubtless encouraged and propagated by alien enemies and sympathizers within the country, of decisive victories by Turkish and German armies in the war; the withdrawal of practically all the Constabulary officers whom the people knew and the restless and recalcitrant elements feared, and their substitution by strange and younger officers whose personal valor and abilities as commanders are unknown as yet to the people; and the universally known withdrawal of all Army garrisons from Lanao, Sulu, and Cotabato, make the public order situation one of great present potentialities. For the fact that all apparently goes well until the date of this report, great credit is due Department Commander Col. Waloe for the wisdom with which he has selected officers for important assignments not only as provincial but also as station commanders, and to the provincial and station commanders themselves for their activity, excellent judgment, patience, tact, and unceasing vigilance in the performance of their duties.

During the year 1917 there were surrendered to or captured by the Government 162 firearms, of which 50 were rifles and carbines; 6 carbines and 23 rifles having been captured.

The total number of firearms surrendered to and captured by the Government during the years 1914 to 1917, inclusive, is 1,186.

There is practically no firearm unlawfully held anywhere in non-Christian territory except the obsolete and generally ineffective muskets, etc., still in the possession of pagans in the mountains in southeastern Mindanao, which have already been mentioned.

#### JUSTICE.

There has been no change or occurrence of special import under this head during the year to be mentioned in this report.

The business of the courts of first instance and of the courts of the justices of the peace apparently has been dispatched promptly and otherwise to the distinct credit of the Government, with resulting increase in the acceptance by Moros and pagans of the system of justice established by the Government as indicated by their increasing submission of both civil and criminal matters for decision by the courts of justice.

There was some increase in the total number of court cases during the year. In so far as this is applicable to criminal cases, it is to be explained not by increase in crime but rather in the extension of Government control and the increased disposition of the people to seek in the Government courts redress for criminal acts perpetrated against them.

Statistics and other detailed data regarding court cases during the year will doubtless be found in the report for the bureau of justice by the attorney general.

#### PRISONS.

Considerable improvement has been effected in provincial and municipal jails during the past year, although there has been no construction or extensive improvements undertaken due to lack of funds.

Prison management and service have been efficient generally.

There is to be noted the increasing utilization of prisoners in agricultural and outdoor industrial work with corresponding benefits to the prisoners and to the Government.

#### PUBLIC WORKS.

Administrative control of construction and maintenance of public works throughout non-Christian territory is now fully taken over and exercised by the insular bureau of public works in uniformity with the law, regulations, and practice in the remainder of the Philippine Islands. For statistics and other detailed data reference must be had to the reports of that bureau.

In general the public works activities during the year 1917 which have received special attention have been the construction and maintenance of roads and trails, improvements of ports and landing facilities, the extension and maintenance of telephone lines and potable water supply, the removal of obstacles to navigation of rivers, and the construction and maintenance of public buildings, especially schools and hospitals.

All existing public works have been well maintained.

New construction has been undertaken so far as funds have permitted, and has been, practically without exception, the continuation of projects begun or partially completed during the preceding year. By Provinces the following gives in general outline the projects of chief importance during the year:

#### AGUSAN.

The Butuan-Cabadbaran Road, opening up an exceedingly fertile agricultural region which thus becomes accessible to coastwise shipping connections with the port of Cebu, which is less than 24 hours distant.

The removal of obstacles to navigation of the Rio Grande and its tributaries which serve the great Agusan Valley and interior region of eastern Mindanao as commercial highways.

The extension of most urgently needed trails and the telephone system to co-ordinate and to confirm the extension of Government control to the interior of the Province.

The construction of small gravity potable water supplies and shallow artesian wells.

The improvement of sanitation of public markets and town sites at the provincial capital and other important centers of population.

The same general program of construction and extension of trails, telephone lines, potable water supplies, and markets, and the sanitation of town sites has also been followed by the other Provinces within the jurisdiction of this bureau.

#### BUKIDNON.

The construction of the interprovincial road extending from the Misamis boundary southward to the provincial capital of Malaybalay and preliminary location work for the extension of this road to the head of navigation on the Rio Grande of Cotabato through eastern and southern Bukidnon. Also the interprovincial road from the Misamis boundary through Talacag southward opening up the western district of Bukidnon; and preliminary location of extensions of this road to the southeast to connect with the Malaybalay Road and to the southward to connect with the interprovincial trail running from the eastern end of Lake Lanao to the central Cotabato Valley.

The construction from local timber of a semipermanent building for the offices and jail of the provincial government at Malaybalay.

#### COTABATO.

The construction of the Kudurangan-Pikit Road, rendering accessible to shipping points on the Rio Grande the great fertile district occupied by agricultural colonies numbers 1, 2, and 4; the interprovincial trail on wagon-road location between Pikit in the central Cotabato Valley and the eastern Lanao boundary, the terminus within the Province of Lanao being at port of Tamparan at the eastern end of Lake Lanao; the improvement of the trail connecting Kabakan in the upper central Cotabato Valley via Kidapawan to the Davao provincial boundary from which point it extends to the Davao Gulf port of Digos; the road trail from Cotabato town via the port of Parang into the interior of the



Buldong district; other trails of secondary importance but essential in the continued extension and maintenance of Government control.

Several important public-school buildings, including dormitory provisions and in the case of the school at Awang (pagan Tirurays) an abundant water supply service by hydraulic ram.

Conservation of the river front at Cotabato town and improvement of the wharf at Glan.

#### DAVAO.

Construction and improvement of roads at several shipping points on the gulf; connecting the gulf port of Cuabo with the Pacific coast port of Mati; and the Mati-Boston Road along the Pacific coast; the interprovincial trail from Digos to the Cotabato Valley, mentioned above; the trail from Tagum at the head of navigation at the Tagum River northward over the low divide to Moncayo at the head of navigation on the Agusan River.

#### LANAO.

The Camp Overton to Camp Keithley section of the main highway from the coast port of Iligan to the provincial capital at Dansalan on Lake Lanao, was necessarily taken over for reconstruction, improvement, and maintenance by the provincial Government from the Army at the request of the latter and in anticipation of the abandonment of the two Army posts mentioned. This road, 30 kilometers in length, is the only outlet to the coast for the great agricultural region surrounding Lake Lanao and constituting the interior of western-central Mindanao. Furthermore, the continuance of Government control over the numerous Mohammedan population in this great region is dependent upon the maintenance of this road for the movement of personnel, supplies, and troops in case of emergency. Rising as the road does from sea level at Camp Overton to an elevation of 2,500 feet at Camp Keithley, and located as it is in a district of copious, torrential rains distributed throughout the year, and because of the heavy freight traffic over it, the maintenance of this road represents a heavy fixed charge. Furthermore, it is necessary to reconstruct a considerable portion and to make extensive improvements on practically the entire road if it is to be maintained in reasonably good condition and carry the constantly increasing freight traffic over it.

Other public-works activities in this province are the construction of the Camp Overton-Iligan-Misamis boundary interprovincial road, including the unavoidable, expensive low bridge and spillway at the crossing of the Iligan River; the improvement and maintenance of the interprovincial trail, mentioned under the preceding head (Cotabato) from Tamparan on Lake Lanao to the Cotabato boundary, from which it extends to Pikit, in the central Cotabato Valley; the road trail from Ganasi at the western end of Lake Lanao to Malabang, on the south coast of Lanao (of the island of Mindanao).

#### MOUNTAIN PROVINCE.

The construction of the wagon road from Tagudin, on the China seacoast of Luzon to the interior to permit standard types of vehicles to reach Cavantes, thus serving as an outlet for the extensive populated districts of Amburayan, Lepanto, Bontoc, and Kalinga, the trail from Cervantes through the provincial capital (Bontoc) on into the subprovince of Kalinga being now passable for narrow bullock carts; the extension, improvement, and maintenance of existing trails now connecting the provincial and subprovincial capitals with all the considerable centers of population, opening up territory not yet completely under Government control, and it is planned providing roads passable at least for the carts of immigrants from Ilocos Norte through Apayao into the lower Cagayan River Valley, from Ilocos Sur via Abra through Kalinga into the central Cagayan Valley, and from northern Ifugao into the upper valley of the Cagayan River in the Province of Isabela.

#### NUEVA VIZCAYA.

The construction of the interprovincial road from the extension of the San Jose-Nueva Ecija road at the Nueva Ecija provincial boundary via Imugan and Bayombong to the Isabela provincial boundary at San Luis. This interprovincial road, the greater part of which is now passable for carts, at least

during the dry season, from Imugan through Bayombong to Isabela, will, when open to wagon traffic between Imugan and the Nueva Ecija boundary afford an outlet to Manila for the surplus palay and other agricultural and food products of the fertile valleys and plateaus of Nueva Vizcaya, and urgently needed communication by connecting the Manila north road with the great valley of the Cagayan River and Provinces of Isabela and Cagayan.

#### SULU.

The extension and improvement of roads from the port and provincial capital at the town of Jolo to open up the interior regions of the island and connect with shipping points on the coasts. This island, which was the scene of continued warfare with but occasional interruption since time immemorial, is doubtless the most fertile of any of its size or larger in the entire Philippine Archipelago. The inhabitants are now well under Government control and peaceful, actively engaged in the production of abaca and copra. Because of the fact that until very recently no wagon or cart road existed on the island the people had no animal-drawn vehicles of any kind, using pack animals for the transportation of their produce and merchandise. Coincident with beginning of road construction less than four years ago the service of motor trucks and automobiles for freight and passengers was established by private capitalists and immediately adopted by the public so generally that there is no indication of disposition on the part of the people to provide themselves with horse or cattle drawn carts or other passenger or freight vehicles as are customarily used elsewhere. This is of obvious general economic advantage, as no work animals are withdrawn from agricultural field work for road transportation. However, the heavy and constantly increasing traffic of automobiles and motor trucks, notwithstanding the strictest regulations and limitations as to gross weight of truck and cargo, occasion serious problems and heavy expense in road maintenance. This is accentuated by the lack of even fairly good stone and gravel for road construction and surfacing.

#### ZAMBOANGA.

The Zamboanga-San Ramon-west coast, the Zamboanga-east coast, and the Dapitan-Dipolog-Lubangan Roads are the important road projects under construction, improvement, and maintenance in this Province. All of these roads are located through well populated, producing agricultural regions—chiefly coconut plantations and rice fields of small agricultural proprietors. The large insular penitentiary and farm of the bureau of prisons is located at San Ramon.

The construction of a concrete pier and dock wharf giving a total dock head of 325 feet for ocean going as well as coastwise vessels at the port of Zamboanga.

The construction of small contagious-disease hospitals at the provincial capital.

The gravity water supply of the town of Zamboanga was completed by the connection of the distribution system with the large permanent reservoir.

In all the Provinces except the Mountain Province there has been the greatest difficulty in securing laborers for public-works operation. Tremendous agricultural development which has been going on created demands for laborers at unusually high wages not only consuming all available local labor but exceeding in demands the capacity of shipping facilities for the importation from Visayas and Luzon of laborers recruited by the Government for plantation and Government public works in Mindanao-Sulu. In fact, transportation difficulties in securing labor for these reasons has been so great during the year that but very little progress has been possible in road work and telephone extension in the Provinces of Davao and Sulu, and in the other Provinces but little less difficulty has been experienced. Definite plans are now being carried out to provide additional shipping facilities for the bringing of laborers from Visayas and Luzon to Mindanao-Sulu and for the supply from the Mountain Province (subprovince of Ifugao) of laborers for road construction and irrigation projects in Nueva Vizcaya.

It is necessary in the general interest that proportionately greater appropriations be made from the insular treasury for road construction to facilitate agricultural development in the rice-producing Provinces of Nueva Vizcaya and Cotabato, and the copra, hemp, and rubber producing regions of Mindanao and

Sulu. Such increased appropriations invested in these immensely fertile though undeveloped regions are certain to produce far greater returns to the insular treasury and infinitely more rapid increase in the national wealth than many public-works expenditures for road extensions in the regularly organized Provinces which are now relatively well provided with such improvements by reason of the large appropriations which have been expended annually for more than 15 years past in these Provinces whereas the construction of roads in Mindanao-Sulu and Nueva Vizcaya has only been begun within the past three years and on a very limited scale. This is emphasized by the fact that during the American military government of Mindanao and Sulu and the entire preceding period of its history practically no permanent road construction of any kind appears to have been done in Mindanao-Sulu with the exception of the road from Camp Overton to Camp Keithley in Lanao and connecting the town of Zamboanga with the San Ramon penal colony.

#### IMMIGRATION.

The problem of civilization of Mindanao and Sulu according to modern standards, or as it may be termed, "the Philippinization" of the Mohammedan and pagan regions which comprise almost the entire territory of Mindanao-Sulu has its most expeditious and positive solution in the movement under Government direction to that territory of sufficient numbers of the Christian inhabitants of Visayas and Luzon. This was undertaken by the government of Mindanao-Sulu in the latter part of 1916.

The accomplishment of this could only be had by systematic propaganda in the more densely populated regions offering encouragement appropriate to overcome the conservatism and oftentimes timidity felt toward leaving the place of birth or long residence to go to seemingly remote and generally reputed savage and uncivilized regions where, from time immemorial it has been believed, there is security for neither life nor property. In addition to definite, well-considered propaganda, it was necessary to provide appropriate personnel and other instrumentalities for the recruiting or other personal arrangements, the embarkation and transportation of the immigrant laborers, homeseekers, and capitalists to their destinations where they must be shown the opportunities portrayed by propaganda and otherwise be given such satisfaction with the change they have made that they themselves become ardent propagandists, attracting relatives and friends to follow them to permanent establishment in Mindanao-Sulu. All these involve an immense amount of detailed planning and execution, the careful selection of personnel, the provision of transportation facilities, suitable arrangements for the disposition and direction of immigrants and prospective investors of capital upon arrival at their destinations—and a following up in attention to individuals and groups after their arrival and until they have become permanently satisfactorily established—countless details too numerous to undertake to mention and only possible of appreciation by persons who have themselves initiated and carried through an undertaking of this character.

In view of the fact that the undertaking was without known precedent of comparably equal comprehensive scope and objectives, it was necessarily an experiment and consequently perhaps of uncertain success. It was believed, however, to be practicable in view of the success already had by the Government in its propaganda in securing families in the Province of Cebu for the agricultural colonies in the interior of the Province of Cotabato and center of that great Mohammedan region.

In order that experience might be had to determine in practice the feasibility of such immigration undertaking, and to afford basis for the presentation of the matter to higher executive authority and the insular legislature, the administrative council of Mindanao and Sulu in the latter part of 1916 appropriated for the purpose the sum of ₱10,000, which had become available through unanticipated profits from service rendered to the public by carrying commercial freight on the cutter *Mindanao* in the shortage of commercial shipping due to withdrawal of coastwise vessels for foreign trade. Practically the same organization which had been successful in securing immigrant families for the agricultural colonies were reconstituted and utilized in this experiment in immigration of surplus population from Visayas and Luzon to Mindanao-Sulu. Encouraging results were had from the beginning of propaganda and merited for the year 1917 the appropriation by the legislature of ₱100,000.

"For aid to such inhabitants of the Provinces of Luzon and the Visayas as may desire to settle in Mindanao and Sulu, either in order to take advantage of the public-land act by purchasing public land or acquiring the same under the homestead provisions of said act, or for the purpose of taking employment as laborers on private plantations or public works, including propaganda and transportation expenses and the delivery thereof."

Under this appropriation the work was continued through the year and extended, arrangement being made with the bureau of labor to utilize its organization in Luzon, and the entire undertaking being carried on in conjunction with and so far as possible under the auspices of the bureau of labor, to the jurisdiction of which it was understood the activity would pass for future years if it proved successful during 1917, which was considered an experimental period.

The first and immediate response has naturally been from the laboring class, and from the very small capitalist having about sufficient money to purchase a work animal and meet the expense of subsisting himself and family for a few months, during which period he works to plant and harvest his first food crop on his homestead.

The demand for contract laborers for work on private plantations, sawmills, and for Government public works soon exceeded the available transportation service capacity of the cutters *Mindanao* and *Tablas*, as also of a cutter chartered from the bureau of customs, and of commercial coastwise vessels. There has been no time during the year when there were not considerable numbers of families awaiting transportation, especially at embarkation points in the Visayas. The reports of immigrants since the first shipment have been so generally favorable as to facilitate the recruiting of laborers by private planters and other employers and encouragement to other homeseekers, who have been impatiently awaiting their turn for accommodation in the limited facilities of Government vessels, have gone on commercial steamers and in small sailing craft. All passenger accommodations of all commercial vessels during the year have been taxed to the utmost and practically every ship has required special permits from the customs authorities to permit the embarkation of passengers in excess of the regulation numbers for the vessels. Because of the great territory (one-third of the land area of the entire Philippine Archipelago) to which this immigration comes by commercial and other privately owned vessels, many of which are so small as not to come within the shipping regulations, it is impossible to state even approximately the total number of immigrants who have entered Mindanao and Sulu by commercial and other private transportation during the year; except that it is clearly at least five times the number which it was possible for the small government vessels to transport, although the latter have been in constant operation to the maximum of possible service.

The total number of persons transported by Government vessels in the course of this immigration enterprise during the year 1917 was 5,076. Of these, 3,652 were laborers under contracts to work on plantations or in other private employment or on Government public works, the balance were home seekers or persons going to engage in agriculture as small farmers and able to provide for themselves after arrival at their destination if provided with transportation; also a limited number of members of families of laborers accompanying the head of family or going to join him. Return transportation is not furnished by the Government; private employers, as a rule, in their agreements with laborers do not provide return transportation, this being in accordance with request of the Government, which undertakes to assist contract-expired laborers to secure advantageous homestead locations on first-class agricultural public lands, thus permanently adding this industrious and generally good element to the permanent population of the region.

The Government urgently needs an appropriate steam vessel, with carrying capacity of at least 1,000 immigrants, to engage constantly in the service.

#### AGRICULTURAL COLONIES.

These Government enterprises, so far as located within non-Christian territory, comprise the Christian and Mohammedan colonies in the central Cotabato Valley and the so-called American colony at Momungan, Lanao. By the provisions of the general appropriation act of the Philippine Legislature for 1917 the administrative control of agricultural colonies is vested in the secretary of agriculture and natural resources.

Regarding the agricultural colony at Momungan, I am unable to make report or give any exact information, as it is administered by the bureau of agriculture, the director of that bureau being the delegate of the secretary of agriculture and natural resources for this project.

For the Cotabato Colonies the secretary of agriculture and natural resources continued administrative control in the office of the governor of the territorial Department of Mindanao and Sulu by delegation. Detailed report regarding these colonies for the year has been submitted to the secretary of agriculture and natural resources.

The Cotabato Colonies have been discussed at length in annual reports to the legislature by the former board on agricultural colonies beginning with the year 1914 and in the annual reports of the undersigned as executive secretary for the year 1913 and as governor of Mindanao-Sulu for the years 1914, 1915, and 1916, to which reference is respectfully made.

The first and principal objective of the Cotabato Colonies project was the determination of whether Christian and Mohammedan Filipinos might be brought to live harmoniously together in remote agricultural regions under conditions definitely promising complete eventual amalgamation. The complete success of the undertaking from this standpoint is conceded by those who at the beginning were most pessimistic and, indeed, adverse opponents of the plan.

The second and perhaps no less important objective of the colonies undertaking was the increased production of staple food products, especially rice and maize, by the transfer of families from the densely populated and less-productive regions of the Visayas and Luzon to these exceedingly fertile and otherwise favored agricultural public lands in the great valley of the Cotabato River and its tributaries. This objective is now definitely attained in so far as humanly possible for the number of individuals engaged. There have been unavoidable crop losses which are to be found in the history of agricultural development of new regions throughout the world, where knowledge of soil idiosyncrasies and seasonal climatic incidence must be attained by the practical experience of farming operations during a period of several years.

The Cotabato colonists are now not only self-supporting, but are repaying to the Government from the proceeds of sale of their surplus products their indebtedness on account of financial aid extended in providing them with work animals, subsistence, and other necessary expenses preliminary to bringing their homesteads into productive cultivation and the permanent satisfactory settlement of the people on their respective locations.

Furthermore, the agricultural colony plan has by its results under the most unfavorable conditions as to the settlement of Christians in the center of a remote and previously hostile Mohammedan region, and without reliable local agricultural information for guidance as to fundamental facts of importance, demonstrated that it is a highly effective and entirely practical method for the most advantageous distribution of excess of population and utilization of agricultural public lands for the economic development of the individual citizen and the rapid increase of the national wealth. The only objection that can be urged against it is the temporary investment of considerable amounts of public funds in the establishment of the people in their new locations, which investment, now estimated to be not to exceed ₱250 per family, if operations be on a scale of not less than one thousand families per annum, may, however, be recovered entirely by repayments from the surplus rice and other foodstuffs produced by the colonists in the first 5 years following their establishment on homesteads. This period of 5 years is fixed because it is that required by law for the perfection of title under the homestead provision of the public lands law, and the exaction by the Government of repayment from the colonists in a lesser period would be prejudicial to all interests involved through preventing the investment of at least a portion of the profits of their annual labor in the purchase of additional work animals and the hire of occasional day labor or otherwise in the extension of the cultivated areas of the homesteads.

There is no more profitable investment offered to the Government than this. And the present is a most opportune time for the Government advantageously to proceed on a large scale in this matter as the experience gained in the successful experiment in the Cotabato colonies is now fresh in the minds of the present available personnel at the service of the Government which will inevitably gradually be lost in the course of time. Furthermore, the popular error of belief that Christian and Mohammedan Filipinos may not form harmonious agricultural communities having been corrected by the success had under the especially selected difficult conditions of the establishment of the Cotabato colonies

where a thorough trial and demonstration has been made, future agricultural colony locations need have no other principal objective than the production of rice and other food staples, so greatly needed to avoid dependence upon foreign supply; and the general economic gains to the nation and the individual. Location may, therefore, in future be at most advantageous points from purely economic considerations; for example: In the fertile valleys of the Tagum and Hijo Rivers, at the north end of the Gulf of Davao, where irrigation without engineering problems can be provided for rice growing and the great hemp plantations of Davao Gulf region be supplied with Philippine rice in lieu of the present Saigon product which is in the aggregate a tremendous economic waste to the country because in addition to the other elements of loss by reason of dependence upon foreign-grown food staples there is also the high cost of freight from the ports of Manila or Cebu for the long coastwise journey to Davao Gulf, and the utilization of space in coastwise vessels for this necessary food staple which space might with greater advantage to the national wealth be utilized by implements, machinery and other material required for the extension of cultivated areas in the Davao Gulf district and throughout southern Mindanao which is dependent upon these same coastwise vessels.

The most satisfactory plan of immediate administrative management of agricultural colonies has been found to be by the utilization of the provincial governor and provincial treasurer of the Province in which they are located. This plan being that which has been worked out in practice in Cotabato colonies, 451 families, comprising 2,510 persons, Christian immigrant colonists and 475 families, comprising 2,892 persons, Maguindanao (Mohammedan) colonists who have been located on homesteads in the colonies pursuant to the plan of demonstration of practicability of harmonious social and political relations in such contiguous and mixed Christian and Mohammedan agricultural communities. A total of 926 families, comprising 5,402 persons, certainly is a sufficient number for the demonstration of the political-social purpose.

The Cotabato agricultural colony plan stands a conclusive demonstration as offering the most effective instrumentality thus far devised for the attainment quickly of the economic, political and social objectives of the Government—being the fomenting of greater production of food staples and general increase in the national wealth; the complete homogeneity of the various regional groups of differing degrees and types of civilization; the development of the highest possible type of citizenship among the masses.

#### PUBLIC LANDS.

Systematic public-land surveys have been continued during the year by the bureau of lands and continue to be one of the most important constructive activities of the government.

It is to be regretted that funds are not available to provide for an adequate increase in a number of survey parties, in order that the surveys of all private real estate holdings may be made, titles determined, and this important taxation resource of provincial and municipal governments be more effectively developed.

To facilitate the orderly layout of homesteads and otherwise and in both the public and private interest avoid the demand and necessity so far as possible for scattered individual surveys by the bureau of lands survey parties, a circular containing appropriate instructions and illustrations was issued by the superintendent of schools for Mindanao-Sulu to all division superintendents, supervising and local school-teachers, and copies furnished to provincial and municipal officials for their guidance in the closer and permanent location of the people on first-class agricultural lands of the public domain. This measure, it is anticipated, will be of great advantage in the economical administration of public agricultural lands in connection with their occupation and eventual acquisition of title by private persons, particularly of small agricultural proprietors who by reason of ignorance need the direction and assistance of the government advantageously to locate themselves permanently.

A general increase is apparent in the taking up of agricultural lands by private persons throughout Mindanao-Sulu and Nueva Vizcaya. The Mountain Province, by reason of its broken topography, does not attract agricultural immigrants, especially because of the extensive public lands of good quality for agriculture available to settlers in the adjacent Provinces of Isabela and Cagayan.

Statistics as to acquisition of public lands should be sought in the report of the bureau of lands, which is the responsible administrative center.

It is understood that there are now before the President important amendments of the public-lands law which were passed by the legislature at its last session. It is important and accordingly earnestly hoped for that there will become effective legislation by which the acquisition of public lands may more effectively be limited to persons and corporations possessing and disposed to invest without delay the necessary capital in cash or labor to bring quickly under cultivation the areas to which they may acquire title. It is feared that under the present law individuals and corporations are securing control of valuable public lands to hold for speculative purposes rather than with the intention of cultivation.

#### FORESTS.

The administration of the public forests by the bureau of forestry appears to have made a decided improvement during the year. This apparently has been due both to the changes in the organization and to better understanding and cooperation with the forestry officials by local government authorities and the general public.

The lumber industry has progressed remarkably in view of the great handicap suffered by reason of increasing lack of shipping facilities. Two of the sawmills which were closed by financial difficulties in previous years since the European war have resumed operations after financial reorganization. Both the Army and the Philippine Government have placed orders with various mills for considerable quantities of lumber, while orders from China and Australia, together with the Manila, Cebu, and local consumption demands, had a decidedly strengthening effect on the industry. At least three of the lumber companies now have their own coastwise vessels, which supplement the service these companies are able to secure from the general coastwise shipping. The Army Quartermaster Corps has also rendered material assistance by furnishing transportation from the mills for lumber supplied under contracts with the military.

Small licensees engaged in logging and other forest production have likewise increased their activities.

The work of the personnel of the bureau of forestry in controlling the destruction of the public forest by persons desirous of making small clearings for agricultural purposes ("cañigín") has been increasingly effective and now appears to be carried on along lines that will gain the cooperation and support of popular opinion through an increasing understanding of the benefits derived from forest conservation and intelligent exploitation.

Statistics as to the quantity of timber and other forest products marketed during the year will be found in the report of the bureau of forestry.

Steps have been taken definitely to set aside as a Government reservation the teak forest on the north coast of the island of Jolo, to which reference was made in the report for the preceding year by the governor of Mindanao and Sulu. As soon as the survey, the delimitation, and proclamation of this reservation have been made its administration will be undertaken by the provincial government of Sulu under arrangement with the bureau of forestry. The plan tentatively adopted is to clean up the forest of undergrowth, clean out the overcrowded areas, and extend the plantation of teak in the open unforested areas now overgrown with cogon grass, the annual burning of which during the dry season is destructive of adjacent forest growth and prevents the natural extension by spontaneous seedlings. Taking advantage of the experience of the Government and private enterprise in Java and elsewhere, it is confidently expected that this teak forest will afford an increasing supply of this incomparable timber for shipbuilding and other industrial use in the Philippine Islands and at the same time become an important source of revenue to the provincial government.

#### MINERAL PRODUCTS.

The important development under this heading during the year has been in connection with the coal fields of the Sibugay, Dumanquillas district on the east coast of the Zamboanga Peninsula. The National Coal Co. has undertaken a comprehensive survey and investigations of this region, with the result that it is understood that actual development work will be entered upon as soon as

the equipment can be secured. The coal is rated as the best steaming coal found in the Philippine Islands and practically the equal of the Chinese and the Japanese steaming coal constantly imported into the Philippines for industrial use. It is understood that the quantity of coal which is available for advantageous mining and marketing will be sufficient to meet the demands of the islands for many years, due allowance being made for progressive increase in consumption demands. The full extent of these coal fields has not as yet been determined. Reports and samples of coal found at many other points have been received and present indications show that ample coal for industrial purchase for a long indefinite period is to be had in these islands.

No important developments have occurred during the year regarding other mineral resources, due chiefly it seems to the difficulties in securing capital during this period of world war.

Gold mining in a moderate or small way has continued in Benguet and Lepanto. Statistics as to production should be sought in the reports of the bureaus of customs and internal revenue.

#### MARINE PRODUCTS.

The industry of pearl and other shell fishing during the year has suffered because of low prices which apparently are due to the continuation of the war.

Sponge fishing has been handicapped by reason of the lack of adequate capital to establish independent marketing facilities in the United States, where the market seems to be dominated exclusively by the large importing houses which appear to find it to their advantage to discourage the entry of Philippine sponges because of their existing relations with the sponge fisheries of the West Indies, especially the fields off the coast of Florida and in Cuba and British colonial waters. Arrangements were made by which a man of long practical experience in the sponge fisheries of Florida made a personal investigation and surveys of typical Philippine sponge fields in Mindanao and Sulu waters. His services were also made available for the instruction of our local sponge fishers in the taking and preparation of sponges to meet the requirements of the American markets.

Negotiations are now being carried on looking to the supply of the Federal Government with Philippine sponges from Mindanao and Sulu waters, eliminating the large New York firms which appear to control the American sponge market and from which large quantities of sponges are being purchased by the Army and other branches of the Federal Government for its use, as well as by the manufacturers of munitions and other war material who require certain kinds of sponges for their factory operations. The bringing of producers into direct sales to the United States Government and large industrial consumers of sponges should result not only to the material financial advantage of both producers and consumers, but also give an impetus to the sponge industry in the Philippines which will enable it to maintain its footing in the American markets. The struggle is comparable with that of Philippine tobacco during the past years to gain a foothold in the American markets, where it was until recently blocked by the large importers of Cuban and Porto Rican tobacco.

The high prices which have generally ruled through the year for both fresh and salted fish in the local markets have strengthened and developed somewhat this fishing industry. There is in this connection great opportunity for the profitable investment of capital and expert management in the taking and preparation of fish products for the Philippine market to take the place of tinned salmon and sardines and salted and otherwise preserved fish which in considerable quantities are imported into the Philippines.

Public schools conveniently located are endeavoring to improve the method of preparation of trepang or "beche de meré," by which this marine product may command higher market prices in China with corresponding financial advantage to the Philippine producer.

Primarily as the result had in an experimental way in the introduction of Chinese carp (a fresh-water food fish), it is planned if possible during the ensuing year to undertake the development of this important food resource in the interior regions which are so remote from the seacoast as to make the prices for salt-water food fish almost prohibitive.

#### COMMERCE AND SHIPPING.

Coincident with the continued and great increase in agricultural products and lumber has occurred a continued decrease in coastwise and foreign ship-



ping by reason of the European war. The southern Provinces are suffering an increasing handicap to their commerce for these reasons.

The Department of Mindanao and Sulu operated throughout the year the formerly coast-guard cutters *Mindanao* and *Tablas*, which were destined to the service of the smaller coastwise shipping points and otherwise endeavoring to meet the deficiency of commercial coastwise shipping service. That office also purchased and placed in service between Cebu, south Mindanao, and Sulu points the coastwise steam schooner *Iman* (formerly the *Matipid*). This vessel was subsequently sold to one of the lumber companies under agreement to retain this vessel as a common carrier in the same coastwise service available to the general public at the freight and passenger tariffs approved by the public-utility commission. Similarly there was purchased and brought to Mindanao-Sulu waters and later sold to another private party the coastwise schooner *Mustavit*, now operated between Cebu and south Mindanao points as far as Davao, carrying both freight and emigrants to Cotabato and Davao. Continued efforts are being made to induce private parties to provide an appropriate coastwise vessel to take over the regular schedule of the cutter *Tablas*, which is now developed to a point of cargo and passenger receipts which under even normal conditions would be attractive to private commercial shipping. It has been practically impossible to use the cutter *Mindanao* during the year for trips of inspection, and also the cutter *Tablas* has been engaged constantly and exclusively in the commercial service of small ports where the amounts of cargo were not sufficient to attract private-owned vessels.

The provincial government of Zamboanga, through its exchange or trading system, together with the largest stockholders in a local lumber company, has organized the Crescent-Star Dock Co. for the purpose of building wooden vessels for the coastwise trade. One 250-ton auxiliary schooner is now under construction by the company, and as soon as plans are received from the United States other appropriate types of vessels for the coastwise service will be begun. Fifty-two per cent of the stock in this corporation is held by the provincial exchange. The capitalization is a mere nominal sum, and contracts for construction of vessels are only taken on a basis by which the work is financed by the party for whom the contract is being executed. It is the expectation of this undertaking to bring to the favorable attention of Manila and Cebu capitalists the unrivaled opportunities for the construction of wooden vessels for the coastwise trade by reason of the immediately available and abundant excellent timber and other facilities; at the same time undertaking to develop an additional local industry of importance. Whenever a satisfactory purchaser is found the shares of stock in the corporation held by the Government will be sold and the Government withdraw from this commercial industrial activity upon which it has entered solely in order to demonstrate the opportunities for profitable investment in this industry which has persisted in remaining at locations in Luzon and Visayas, which are now remote from forests capable of producing suitable material without unavoidable transportation and other charges.

The commercial firm of Atkins, Kroll & Co., of San Francisco, Cal., which for many years has successfully engaged in trade in Guam and the islands of the Pacific has established principal Philippine offices at Zamboanga, where appropriately located land has been purchased and warehouses, wharves, and other shipping facilities are being constructed. This firm, owners of a considerable fleet of trans-Pacific and coastwise sailing vessels and auxiliary motor schooners, has now established branches at various points in south Mindanao and in the Sulu Archipelago in addition to their principal station at Zamboanga. They have brought in for their service in the local coastwise trade two small auxiliary schooners, and their larger trans-Pacific cargo vessels have begun service between Zamboanga and San Francisco. This important commercial development during the year has already strengthened materially the export demand for copra and contributed to facilitating the trade in imported merchandise.

The British steamship line between Singapore, North Borneo, Jolo, and Zamboanga has been unable to maintain with regularity its scheduled trips to the Philippine ports just mentioned, because of the increased demands for space by the trade between British North Borneo and Singapore to which preference is given. Nevertheless, it is noteworthy that customs receipts at the port of Jolo during 1917 were the largest of any year in the history of that

port. The port of Zamboanga, however, has suffered as to the amount of customs receipts, because of the greatly increasing diversion of trade from the territory within its district from Singapore as the point of supply to Manila and Cebu, the customs receipts of which ports now include those corresponding to the port of Zamboanga by reason of the entry as imports at those ports and transshipment of foreign merchandise to merchants and consumers in the Zamboanga customs district.

The coaling station near Zamboanga for Government vessels has continued to be operated during the year by the office of the department of Mindanao-Sulu.

#### MANUFACTURES.

Developments under this heading as to lumber have been mentioned under the heading "Forests"; and as to shipbuilding under the heading "Commerce and shipping." Otherwise there has been nothing of special significance meriting mention under this heading in this report.

Special attention has been given to the local manufacture of brick and tile for use in building construction in lieu of cement and iron, especially tile as a substitute for roofing iron, because of the extremely high price and other difficulties incident to securing iron and steel products since the beginning of the war.

#### BANKS AND CREDITS.

The branch of the Bank of the Philippine Islands at Zamboanga and the agencies of the national bank at all provincial capitals have constituted the local commercial banking facilities.

The agricultural and the postal savings banks have made some loans on agricultural and urban properties during the year.

The important developments under this heading have been the establishment of agencies of the national bank at provincial capitals under the immediate charge of provincial treasurers, and the establishment by El Hogar Filipino (a building and loan association) of Manila of a branch office at Zamboanga, where a considerable business has been done in loans to small proprietors on their cocoanut plantations on terms which appear to be much more favorable to the borrower than those otherwise as advances from commercial firms engaged in the copra trade or loans from private money lenders. It is understood that El Hogar Filipino has made available for investment at Zamboanga ₱500,000 in loans on producing copra plantations and other investments within its authorized customary operations. This affords much needed material relief in the credit facilities available to cocoanut planters and other eligible classes of property owners at Zamboanga, especially as El Hogar enters a field chiefly outside the limitations of the regular commercial banks.

#### POLITICAL CONDITIONS.

The only development during the year under this heading has been the action by the Governor General under his statutory authority making elective the posts of municipal president of the provincial capitals of Zamboanga and Davao. As provided by the proclamation of the Governor General in each case, elections were held for these offices in their respective municipalities. Much local interest was aroused by the vigorous electoral campaign carried on by the candidates, and the election results gave decisive majorities to successful candidates in each instance. Apparently capable men have been elected to office.

Political conditions may be stated as good throughout non-Christian territory, the term political being used in its most comprehensive sense. In the localities where a considerable Christian population is found there is naturally some agitation for the extension of the provisions of the general election law applicable to the officers of provincial governor and representatives in the Legislature. This movement, however, is naturally limited by recognition of the fact that it is still necessary to wait a few election periods until the Mohammedan and pagan boys now attending public schools shall have become men of age to qualify as electors and thereby give reasonable participation in electoral activities to their elements of the local population.

To a constantly increasing degree appointive municipal and other local government offices are selected by popular preference as expressed in public meetings, so far as practicable, and leading up to the formal elections prescribed by the election law, preparation for the extension of which to non-Christian territory is one of the specific objects of this office.

## INSPECTIONS.

As frequent and extensive inspections as possible have been made during the year by the undersigned in person or by authorized representative. Through the courtesy and cooperation of the Department commander of constabulary, the Department superintendent of schools, the supervising engineer, and the local representatives of the bureaus of customs, forestry, health, internal revenue, and lands much has been accomplished in maintaining a comprehensive view of public administration in general throughout the several Provinces, and the coordination of the several branches of public service.

Provincial governors have, as a rule, continued to devote at least 20 days of each month to inspections and other duties in their territory outside their respective capitals, especially in the more remote and backward districts within their territorial jurisdiction.

It was not possible until March, 1918, by reason of other official demands, for the undersigned to make a field inspection of the Mountain Province and Nueva Vizcaya. However, all Provinces except Mountain Province and Nueva Vizcaya were inspected by the undersigned at least once during the year.

It is assumed that the field inspections by the secretary of the interior will be mentioned in the report of that office.

The secretary of commerce and communications made a comprehensive personal inspection of all Provinces of Mindanao and Sulu, including the trip across the island of Mindanao, through Bukidnon and Cotabato, in company with the secretary of the interior early in the year.

The secretary of agriculture inspected various districts of Mindanao-Sulu during the year.

## PERSONNEL.

The administrative officers charged with the conduct of affairs of the bureau of non-Christian tribes and its component elements are as follows:

Director, F. W. Carpenter.

Acting in the absence of the director from the Manila office, Vicente Morente, assistant chief, executive bureau.

*Mountain Province.*—Provincial governor, Aquilino Calvo; provincial secretary-treasurer, Nicolas Encarnación; third member, Maximo Bona.

*Nueva Vizcaya.*—Provincial governor, vacant; provincial secretary-treasurer, Tomás P. Maddela; third member, Emilio Tolentino.

*Territorial Department of Mindanao-Sulu.*—Governor, Frank W. Carpenter; secretary and acting attorney, Teopisto Gulingona; delegate, Doroteo Karagdag; assistant secretary and acting Department treasurer, H. B. Hughes.

*Agusan.*—Provincial governor, Rafael Acuña; provincial secretary-treasurer, Serafin Marabut; third member, Juan Corvera.

*Bukidnon.*—Provincial governor, Manuel Fortich; provincial secretary-treasurer, José Agudo; third member, Faustino Abello.

*Cotabato.*—Provincial governor, C. B. Carter; provincial secretary-treasurer, José Unson; third member, Datu Ampatuan.

*Davao.*—Provincial governor, Francisco Sales; provincial secretary-treasurer, Juan Posadas, jr.; third member, Antonio Pichon.

*Lanao.*—Provincial governor, T. W. Coverston; provincial secretary-treasurer, Elias M. Ataviado; third member, Amal Manablang.

*Sulu.*—Provincial governor, Guy N. Rohrer; provincial secretary-treasurer, P. D. Rogers; third member, Julius Schuck.

*Zamboanga.*—Provincial governor, Agustin L. Alvarez; provincial secretary-treasurer, Ildefonso Coscolluela; third member, Awkasa Sampang.

During the year, as will be noted by comparison with the roster of personnel at the close of the preceding year, there have occurred a large number of changes in important administrative positions. These changes have been—

In the office of Department secretary by, the appointment of Teopisto Gulingona, vice Ponciano Reyes, promoted to be judge of first instance. The promotion of Mr. Gulingona to be Department secretary from the office of governor of the Province of Agusan was decided upon because of the exceptional abilities he had demonstrated in the successful administration of the provincial government of Agusan.

The retirement of Charles R. Cameron, assistant to the Department governor and acting Department treasurer, who while in the United States on leave of absence entered the Federal service (captain, Aviation Corps, National Army). The duties of this highly qualified officer, of long experience in public adminis-

tration in the Moro Province under military government and subsequently in the Department government, were divided between the Department secretary and the newly created position of assistant secretary and acting Department treasurer, which was filled by the promotion of H. B. Hughes from the office of provincial secretary-treasurer of Zamboanga, who had likewise for many years held important administrative offices at Zamboanga. To the vacancy caused in the office of provincial governor of Agusan by the promotion of Mr. Guingona, Mr. Rafael Acuña was appointed by transfer from the office he was holding of member of the House of Representatives for Mindanao-Sulu.

In the provincial government of Cotabato two important changes occurred, occasioned by the retirements of Gov. Bryant and Provincial Secretary-Treasurer Klar. Both these officers had served the Government since the organization of the insular civil régime, in 1901; Gov. Bryant having for many years held office as treasurer and subsequently governor of non-Christian Provinces in which he had demonstrated constructive ability of a high order. Mr. Klar by his efficiency in the treasury service had likewise attained high place. These vacancies were filled by the appointment as provincial governor, through the courtesy of the chief of constabulary, of Capt. C. B. Carter, Philippine Constabulary, who for 10 consecutive years had been on duty in the Province of Cotabato and for more than 3 years as senior inspector and provincial commander of constabulary. The vacancy in the office of the provincial secretary-treasurer was filled by the promotion and transfer of Mr. José Unson from Samar, who is one of the most experienced and highly efficient officers of that branch of public service.

Gov. Causing, of Davao, was promoted by appointment as auxiliary judge of first instance and the resulting vacancy filled by the appointment as provincial governor of Mr. Francisco Sales, a successful business man prominent in public affairs and highly esteemed by the best elements in Leyte and Cebu. Mr. D. S. Hewitt, who since the retirement of Provincial Secretary-Treasurer McMahon, of Davao, in August, 1916, had acted as provincial secretary-treasurer of Davao, to enable him to enter more advantageous commercial employment, was replaced by the transfer from Oriental Negros of Mr. Juan Posadas, jr., also one of the most experienced and efficient members of the provincial treasury service.

Lieut. Col. H. Gillsheuser, Philippine Constabulary, who through the courtesy of the chief of constabulary performed the duties of provincial governor of Lanao, retired for the purpose of entering more advantageous commercial employment and the resulting vacancy was filled by the promotion of T. W. Coverston from the office of secretary-treasurer of the same Province. The vacancy in the latter office was filled by the appointment of Mr. Elias M. Ataviado, recommended by the chief of the executive bureau from the personnel of the provincial-treasury service, at the time acting provincial treasurer of Bulacan.

Gov. Joaquín D. Luna, of the Mountain Province, was appointed by his excellency in October, 1916, one of the two senators representing in the Insular Legislature pagan and Mohammedan territory now constituting the jurisdiction of the bureau of non-Christian tribes. To the vacancy caused by this change Dr. Aquilino Calvo, formerly governor of the Province of Pangasinan, and member of the Philippine Senate from the district comprising the Provinces of Pangasinan, Zambales, and La Union, was appointed February 26, 1917.

Mr. José Martínez was transferred from the office of secretary-treasurer of the Mountain Province to that of provincial treasurer of La Union and the resulting vacancy filled by the promotion of Mr. Nicolás Encarnación from provincial treasurer of Antique on the recommendation of the chief of the executive bureau.

Provincial Gov. Leo J. Grove, of Nueva Vizcaya, retired from the Philippine service to return to the United States and the resulting vacancy had not been filled at the close of the year.

Gov. Luis Lim, of the Province of Zamboanga, died almost immediately after his return from a long and exhausting field inspection. As his successor Mr. Augustín L. Alvarez, a practicing attorney at law, resident and born in the Province of Zamboanga, was appointed. The vacancy caused by the promotion of Mr. H. B. Hughes to be assistant secretary and acting Department treasurer was filled by the appointment of Mr. Ildefonso Coscolluela as provincial secretary-treasurer by promotion from the treasuryship of the provincial government of Bataan pursuant to recommendation by the chief of the executive bureau.

As will be noted from the foregoing, there occurred during the year 14 changes in important executive positions, involving the loss to the executive branch of public service in non-Christian territory of 11 highly efficient experienced officers, most of whom had had long training in their duties, in some instances more than 15 years. All these changes were due to circumstances entirely beyond the power of the Government to prevent in the cases of retirements, except by grave injustice to officers who had by long and excellent service merited the unqualified favor of the Government, and in the cases of the promotions of Messrs. Reyes and Causing to the judiciary the interests of the public service were the primary consideration, as their experience in the executive branch of the Government and their professional qualifications peculiarly fitted them to strengthen the judicial branch of Government. In the case of Judge Reyes, whose assignment was to the vacancy existing in the judicial district comprising the Provinces of Cotabato, Davao, Sulu, and Zamboanga, caused by the retirement of Judge G. N. Hurd, the sacrifice incurred by the executive branch was directly in the interest of Government in these Mohammedan regions, in view of the fact that not only had Judge Reyes had four years' experience as Department attorney and Department secretary in direct executive administrative relations with the Mohammedan population, but by reason of his duties as the legal adviser and representative of the executive branch of Government he had made a thorough study of Mohammedan law textbooks and also of the customary laws of Mohammedans and pagans in the Philippines. The assignment of Judge Causing as auxiliary judge of the group of districts including the Mountain Province and Nueva Vizcaya likewise strengthens the Government in those regions of Luzon inhabited by pagans, where his experience and knowledge of customary laws gained in the government of the large pagan population of the Province of Davao will be of direct value to him in the administration of justice.

The undersigned not only personally but officially laments the loss of so many able official associates whose experience, excellent judgment, self-sacrificing devotion to the public service and loyalty to the policies of the Government have contributed to and in fact accomplished whatever of success in their respective spheres the civil régime is credited with having had in Mohammedan and pagan territory during the past four years and now within the jurisdiction of this bureau.

The following general comment on the subject of personnel, being of equal application now and to the entire territory comprised within the jurisdiction of this bureau, is quoted from the report for last year rendered by the undersigned as governor of Mindanao-Sulu:

"It is with increasing and very great difficulty that competent men are secured for appointment in the public service here. The work in all branches of Government in Mindanao-Sulu is of a constructive rather than routine character; there are involved in the service not merely constant personal sacrifice of the conveniences and social life of the Provinces of Luzon and the Visayas, but the positive hardships of travel and life in the jungles of swamps and mountains; and even the provincial capitals are remote and in but infrequent mail communication with the rest of the world. The natural hesitation or unwillingness of competent men to give up assured employment and prospects in their home communities for the venture of service in Mindanao-Sulu is accentuated by the popular fear of encountering material hostility and probably violence among Mohammedans and pagans, as it naturally is not possible entirely to dissipate the established popular convictions and traditions of recent years and past generations in Luzon and the Visayas as to the attitude of the people and conditions in Mindanao-Sulu. Furthermore, the lack of provision for Government officers and employees who become permanently invalidated by reason of disease or injury contracted in the public service logically deters many of the best type of men in the public service or private occupations in Luzon and the Visayas from entering public service here, and this is augmented by the fact that the salaries which may be paid here do not enable a man with wife and even not more than two or three children dependent upon him to provide against the contingencies of death or invalidism by salary savings. A certain type of inexperienced or otherwise incompetent individuals, of course, may easily be secured, even at materially reduced salaries. But with such personnel it will be impossible to accomplish the economic and political purposes of Government here, and the contribution which this, by far the richest one-third of the archipelago, may and should make the national wealth and homogeneity will indefinitely be delayed and, indeed, endangered."

It is not only with reference to the higher administrative positions, but equally true regarding subordinate positions in all branches of Government service within non-Christian territory, that increasing difficulties are encountered in securing and retaining competent men. Not only is the service unattractive as compared with other branches of the Government, by reason of station at remote points, the hardships of field work, the unavoidable requirements of longer hours and greater intensity of application to official work, in many instances the nervous strain of recurring delicate public-order situations, and other distinctive circumstances peculiar to this service as compared with service in the city of Manila and in the regularly organized Provinces, but also the great phenomenal developments in agriculture and commerce, offer in private employment or individual private enterprise materially greater compensations. Government is obviously greater in the extent of its organization and diversity of demands upon the abilities of its personnel than is any private corporation or individual agricultural, commercial, or industrial enterprise. It is apparent that if the Government is to be administered and served with efficiency comparable with that of good private business, which the taxpayer as a stockholder in the public corporation, which is the Government, has an undeniable right to and sooner or later will demand, the best abilities and most efficient honest services available should be secured and retained to the Government. This is true for the same fundamental reasons which cause well-managed private corporations to seek for and hold in their services the best-obtainable personnel for their purposes. Unfortunately the results of the great public corporation (the Government) unlike private corporations may not be stated in terms of periodical cash dividends to the stockholders (taxpayers). The dividends are in the form of the public services maintained and offered to the people. It is indeed unfortunate that the taxpayer does not yet demand and exact the degree and quality of these services to which he is entitled; and oftentimes through lack of understanding and appreciation of the fundamental elements essential to satisfactory and beneficial service the public mind is misled to demand the fixing of compensations of public servants at rates lower than the market price established by private employers for similar grades of ability and capacity to serve. Specific cases which occasion the foregoing comment are the payment of a private corporation for services in a subordinate capacity in a single industrial establishment in the Philippines of a higher rate of compensation than the maximum which may be paid to the chief executive of the government of a Province whose territorial extent is greater than was that of the Kingdom of Belgium and involving corresponding constructive and administrative ability; the offer of higher rates of compensations for resident managers of individual agricultural plantations than the maximum which may be paid any provincial governor or provincial treasurer; the offer of higher rates of compensations to chief clerks, stenographers, and bookkeepers by private agricultural, industrial, and mercantile enterprises than may be paid employees of these grades in the public service in non-Christian territory. The foregoing facts, in confirmation of which numerous specific instances may be cited, are submitted as important pertinent information which might otherwise not come to the attention of higher authority.

On January 1, 1917, there were in the service of the territorial department and provincial governments now comprised within the bureau of non-Christian tribes 15 American officers and employees, the balance being Filipinos. This does not include constabulary, the personnel of the bureaus of public works, etc., but exclusively the territorial department and provincial governments. On December 31, 1917, six (40 per cent) Americans had been replaced by Filipinos.

#### CHRISTIAN, MOHAMMEDAN, AND PAGAN RELATIONS.

Progress in the development of cordial and friendly relations between Christians and Mohammedans and Christians and pagans has continued throughout the year.

Both Mohammedans and pagans display an increasing confidence and disposition to closer social, political, and trade relations with Christians, and it is clearly within the power and pleasure of the latter to maintain and develop this happy situation until these three elements of population which for centuries have been distinct and held aloof by difference in type of civilization and religious and social customs shall have merged in one harmonious, homogenous people. Sufficient time has not yet passed since the beginning of systematic propaganda and other efforts by the Government to have this gratifying situa-

tion now permanently and firmly established. One of the principal efforts of Government and of all individuals in private and public life who are conscious of their responsibilities for the successful accomplishment of this important factor to the national efficiency and life of the country must unceasingly continue sustained thoughtful effort for many years to come.

#### RECOMMENDATIONS.

Again quotations are made from the report of the undersigned for the year 1916 as governor of Mindanao-Sulu, as of continuing application and extensive to the entire territorial jurisdiction of the bureau of non-Christian tribes:

"The following recommendations are premised upon the experience of past years and careful consideration of the relation of apparent urgent present needs to eventual results in the public interest so far as now possible to anticipate, and are limited to matters requiring legislative action. The creation of fundamental conditions assuring, so far as humanly possible, permanent stable government is taken as the objective of controlling importance. The present generation of Mohammedans and pagans is now disposed to peace and is loath to incur liability of further punishment by the armed forces of Government. The boys of school age of to-day will, within a very few years, be the men constituting the controlling factor for or against peace and good order under whatever may then be the constituted government. If the fathers become, in the near future, permanently located on their own land, with documentary evidence of ownership, which is more highly prized by the native of Mindanao-Sulu, if possible, than by the native of the northern provinces or by the American farmer, and if the children of to-day be given the school opportunities their parents desire for them and to which they are morally entitled from the Government, the expenditure of the large sums of Federal and insular funds and the great sacrifices of lives which have been made in Mindanao-Sulu during the past 18 years will not have been in vain, nor will they have to be made anew. If, however, Government administration here be dependent wholly upon inadequate insular aid and the exceedingly meager present revenues of the as yet embryo provincial and municipal governments, then, in less than 10 years from now when a new generation grown up without the civilizing influences of schools, proprietorship of land, the impress of public works, etc., and without the sad experience had by their fathers of the chastisement administered to disturbers of the public peace, and will have come into control of public opinion in this region, the maintenance of public order will again present problems requiring large expenditures of lives and of public funds by the armed forces of Government. Then, whatever there has been of progress in the accumulation of wealth, the social betterment of the people, and other benefits of civilization will inevitably in great part be destroyed. Previous years may be considered a period of trial, of theories, and the ascertainment of what is feasible and most productive of desired results. The Governor General and the Legislature have wisely and liberally provided aid from the insular treasury for the past three years of this period of investigation and experimental effort, and this liberality in material aid has been the convincing argument beyond the greatest potentiality of mere words in winning the confidence and cooperation of Mohammedans and pagans. This confidence and cooperation given by these formerly suspicious and hostile elements of native population have been expressed in material form not only in formal submission to Government and obedience to law, but by the payment of taxes and other Government dues, voluntary relinquishment of equitable rights to land required for public purposes, contributions of materials and labor without compensation to the construction of public buildings, trails, etc., and especially in the unstinted expenditure of strength, time, personal influence, and resources in assisting the Government to convince recalcitrants and apprehend outlaws. The present time is the most opportune for constructive work. And for this adequate appropriations of insular funds must be made to supplement local, provisional, and municipal revenues if the progress already made be not lost and the greatest eventual economy to the insular treasury be given due consideration. Public order, present and future, and consequent political and economic advance may best be assured by due extensions of primary schools, surveys and documentation of privately occupied public lands, and the giving of impetus by encouragement and direction to immigrant agriculturalists from the northern islands and Provinces. Of the total sum available for appropriation from the insular treasury for

aid in support of public instruction below the university grade at least one-third should be devoted to Mindanao-Sulu (including the contiguous Provinces of Misamis and Surigao, which comprise some non-Christian or backward population). If this be done for a period not exceeding five years and coincident therewith there be legislative and executive action duly facilitating definition of private ownership of land and agricultural development, the Provinces of Mindanao-Sulu may then, without prejudice to the general interest of the entire archipelago, be placed with the regularly organized Provinces on a per capita basis in the distribution of insular aid to primary schools, as local school revenues may by that time, through the facilities indicated for the development of revenue from the land tax, be able to bear their proportional share of expense of school maintenance on approximately equal footing with the other Provinces of the archipelago. The experience of past years permits no other conclusion than that here as elsewhere efficient primary-school instruction for four years is the great bulwark of public order and the best foundation of the type of citizenship which is the national ideal and essential to the creation of stable democratic government."

The following specific recommendations are respectfully submitted:

(a) That insular financial aid in the sum of ₱1,000,000 be appropriated annually for a period of at least five years for the extension and maintenance of primary schools having as their chief objectives appropriate instruction in agriculture, industries, elementary commerce, and the duties and rights of citizenship, throughout the territorial jurisdiction of the bureau of non-Christian tribes (40 per cent of the land area of the Philippine Archipelago).

(b) That insular aid in such sum as the director of lands may report that he can economically utilize to secure the necessary technical personnel and other expense for public-land surveys to facilitate the permanent location of the people by the issuance of titles to free patents and other private acquisitions of agricultural lands from the public domain under the provisions of the public-land laws. And in this connection that a definite program of direction and encouragement of persons to assure the orderly and otherwise advantageous exploitation of the best agricultural districts remaining in the public domain, be authorized and carried out by the bureau of lands.

(c) That the public-land laws be amended so as to compel under penalty of forfeiture the productive cultivation and exploitation of lands acquired by private corporations and individuals from the public domain; thus preventing the acquisition and holding of valuable agricultural locations for purely speculative purposes without appreciable cultivation or other exploitation in the interest of the national wealth.

(d) That existing law be amended to provide that neither free patent nor homestead titles may be mortgaged or alienated in any degree of the right of proprietorship without the prior favorable recommendation of the provincial governor and the approval of the director of lands in any case in which the owner in interest is unable himself to read intelligently a statutory form of the mortgage or sale document in either English, Spanish, or the local dialect, under penalty of forfeiture of the property to the State and imprisonment of the purchaser, of the notarial officer and witnesses before whom the mortgage or sale document, if any, of whatever kind was accomplished. This is essential to prevent fraud being perpetrated on illiterate persons and the privation of the non-Christian and other backward peoples of their land, the gradual creation of unduly large areas of individual ownership, and the forcing back to the mountains or into the large centers of population of large numbers of the less intelligent elements of the people with the consequent grave menace of agrarian troubles. This is now in effect the law in the territory formerly the Moro Province, and is the only apparent method of preventing the simple-minded illiterate, especially the Mohammedan and pagan, from being defrauded of the most valuable fruit of his labor and forced to return to the mountains or to become a vagabond in the lowlands.

(e) That there be adopted a definite comprehensive plan for the distribution of population by the transfer of the surplus from densely populated districts to advantageous agricultural locations on public lands under appropriate direction with coordinate activity by the bureau of lands, agriculture, and labor; that the sum of at least ₱250,000 per annum, for a period of five years, be appropriated from the insular treasury to meet the expense of propaganda, free transportation of emigrants and their families, and such further assistance, if any, as circumstances in special classes of cases may warrant in the public interest.



(f) That the sum of ₱500,000 be set aside annually from the insular treasury for a period of five years to carry into effect a program of economic development by means of agricultural colonies so located as to open up and eventually attract a current of unassisted immigration to important highly fertile agricultural regions which it has not been possible otherwise to bring to the favorable attention of the public.

(g) That the present law limiting the borrowing capacity of a provincial or municipal government to a certain percentage of the total real-estate value as assessed for taxation be amended so as not to apply to the provincial and municipal governments in non-Christian territory. In practice such restriction necessarily has the effect of depriving practically all provincial governments and all municipal governments, other than Zamboanga, of their only resource for financing important revenue-producing public works, such as municipal markets, waterworks, etc. This situation can not otherwise be remedied within any definite time or until the greater part of public lands shall have passed to private ownership under private titles and as real estate may be assessed for taxation. There is urgent need in every one of these nine provinces for modern market construction on the customary market sites which have been used by the people from time immemorial and which at present are neither possible of sanitation nor productive of more than a small fraction of the revenue which potentially exists. Municipal water supplies and other public works are also urgent. The borrowing capacity of these local governments is at present dependent upon revenues other than the land tax, and markets are typical of public works, investment projects which, from their net receipts, would quickly repay their investment cost. It is suggested that in this new territory an adequate safeguard against incurring excessive indebtedness would be to require due investigation and report by the executive secretary, and favorable recommendation of each project by the insular auditor, before investment loans be made.

That the registration of Chinese be again authorized to afford opportunity for legalization of residence in the Philippine Islands of those worthy Chinese individuals who, through lack of information or otherwise, without fault of their own, failed to take advantage of the opportunity to register, which terminated April 29, 1904. Well-deserved relief would thus be afforded to a number of Chinese merchants and property owners who for many years have resided in Mindanao-Sulu, married, and reared children here. These men have in every way definitely identified themselves with the country. Inasmuch as this matter has been the subject of a separate report, reference is respectfully made to it for further discussion of the subject.

That existing law be amended so as to permit passengers traveling between the ports of Jolo, Zamboanga, and Manila to take passage between these coastwise points on foreign steamers making direct voyages. The law at present practically prohibits this. As a consequence, a person in Zamboanga having business in Manila may not take a foreign steamer making the voyage from Zamboanga directly to Manila in 35 to 48 hours, but is required to wait for a coastwise vessel, none of which run directly between Zamboanga and Manila, but, stopping at various intermediate points, consume as much as five or seven days. Furthermore, the coastwise vessels plying between Jolo, Zamboanga, and Manila are small, most of them of very old type, not designed for service in the Tropics, and passenger accommodations are not only inadequate but almost unendurable to persons accustomed to modern ships. While the traffic between Manila and Cebu and Manila and Iloilo is apparently well provided with modern coastwise vessels, this is not true so far as concerns Zamboanga and Jolo. The volume of passenger and freight traffic between Jolo, Zamboanga, and Manila does not now, and probably will not for some time to come, warrant the maintenance of direct ship service. It is a serious disadvantage imposed upon business here, especially the passenger traffic, to prohibit the use of the large modern freight ships which include the ports of Manila, Zamboanga, and Jolo on their regular schedules. While the protection of our coastwise shipping interests may warrant this prohibition in the case of traffic between Manila and Cebu and Manila and Iloilo, it operates as to Manila, Zamboanga, and Jolo seriously to restrict freedom and economy in trade and seriously to discourage the diversion of the commercial relations of this region from Singapore to Manila.

It is recommended that existing law be amended to prohibit justices of the peace from engaging in the practice of law before the court of first instance and the supreme court, which are appeal tribunals from the courts presided over by these officers. Also, they should be prohibited from the drafting of legal doc-

uments as notaries public or otherwise for private profit. Experience has demonstrated that justices of the peace themselves are not able always to differentiate clearly between their activities as officers of the judiciary and as private attorneys. It is not strange, therefore, that not only the illiterate but the mass of the people, especially Mohammedans and pagans, are entirely incapable of grasping the distinction between the official and private acts of these very important officers, who constitute the first and generally contact line of the judiciary branch of Government in its relations with the people. Instances have occurred in which the executive branch of Government has suffered no little embarrassment in the exercise of governmental control through the inability of the people to distinguish the official acts of justices of the peace and the payment of fees to individuals in such official capacity and for their services as private attorneys without authoritative official regulation as to lawyers' fees.

(h) That provision be made by the Philippine Legislature for special justices of the peace to relieve provincial governors and their deputies of these duties in the unorganized territory, known as municipal districts, outside the jurisdiction of the justices of the peace of constituted municipalities (and townships in the Mountain Province and Nueva Vizcaya). These positions will require, in addition to elementary general knowledge of law and forms of procedure of the justices of the peace courts (not necessarily graduate lawyers), ability to read and write modified Arabic script, which is generally used by Mohammedans; competent knowledge of dialects within the jurisdiction; and thorough sympathetic understanding of local customs. The extension of Government control has already passed in degree in many districts to the point where it is necessary that duly constituted courts of justices of the peace be organized. Provincial governors and deputy governors, as a provisional arrangement, have been authorized by statute and appointed by the Governor General to act *ex officio* as justices of the peace in territory not yet constituted organized municipalities. While this arrangement is unusual under the theory of separation of powers between the executive and judiciary, yet it has proven in practice an excellent and, in fact, the only feasible method in the preliminary period of establishment of Government control, and the substitution thereof for the customary local governments which the people themselves had gradually evolved by themselves or accepted under Arab and Malay Mohammedan religious domination. These special justices of the peace will necessarily possess not only the peculiar qualifications stated above, but an unusual strength of character and morality that they may not bring discredit upon the Government whose system of justice they will establish. It will not be possible to secure such men at lower salaries than those authorized for justices of the peace of provincial capitals, and inasmuch as it is imperative they be prohibited from engaging in private business in any way, either directly themselves or any members of their immediate families, the law should provide for the fixing of salaries by the secretary of justice on the recommendation of the secretary of the interior.

(i) The maximum salaries prescribed by statute some years ago for municipal presidents is now a practically insurmountable obstacle to securing the services of competent, honest executives, especially in the large centers of population by reason of the fact that there is not in the comparatively newly developed or other towns in non-Christian territory the element of retired farmers, merchants, and professional men, or younger men of independent private income, who may be drawn upon as candidates for the office of municipal president. Practically all available competent persons are dependent upon their earnings from their private business undertakings or other employment requiring constant personal attention incompatible with due performance of official duties. It is earnestly recommended that the existing law be amended to permit the fixing of salaries of municipal presidents by provincial boards, subject to approval by the secretary of the interior.

(j) That the municipal code of Mindanao-Sulu providing for the organization of local governments as municipalities or municipal districts be extended to the territory comprised in the Mountain Province and the Province of Nueva Vizcaya, repealing the existing law, enacted 17 years ago, in 1901, providing for local governments organized as "townships" and "settlements." The municipal code of Mindanao-Sulu embodies the consensus of authoritative conclusions after the experience of more than 15 years local government in the Philippine Islands and gives logical sequence of development of local government among the non-Christian or backward elements of population, from the simplest type of embryo municipality (municipal district) to the highest type of organization as a fully constituted autonomous municipal corporation.

(k) That a statutory provision be enacted authorizing the secretary of the interior, upon the recommendation of a provincial board, to order the substitution of the regular capitation or cedula tax law for the special provisions as to the cedula and road tax, which are under existing law mandatory in the Mountain Province and Nueva Vizcaya. In the latter Province and in the more advanced subprovinces of the former this special personal-tax requirement is not only obsolete, by reason of the advance of the local population in the defined ownership of real estate subject to taxation, but is a serious deterrent to immigration from the regularly organized Provinces where such special personal tax is not required.

(l) That the statute providing for provincial exchanges or trading systems be reenacted, clarifying many provisions which have in practice been found to defeat the purposes of the law and amplifying the existing statute, by permitting provincial governments under due limitations and control by higher authority to initiate corporate undertakings in the encouragement of agricultural and industrial development.

(m) That the Legislature by joint resolution adopt a program of stated amounts or definitely fixed proportional appropriations for the completion of the extension of Government control and economic development in non-Christian territory by which these provincial governments shall be brought within a period of five years, or such other period as the Legislature may decide to be feasible and more desirable, upon a basis of economic independence in the sense in which the regularly organized provincial governments are self-supporting, thereby terminating appropriations in special aid of the non-Christian Provinces.

#### CONCLUSION.

Law and order now obtain throughout Mohammedan Philippine territory, but popular compliance and cooperation are as yet only tentative and easily lost. They may be firmly established only in the course of time and by constancy in the present policies of responsible authorities in Manila, conscientiously and correctly executed by local officers who establish themselves in the hearts of the people through invariable kindness, respect for local customs, religious ceremonies, and faith, absolute honesty, and justice in both official and private relations. Neither Mohammedan nor pagan Filipino has national thought or ideals. They are now yielding to a policy of attraction directed at them as substantive Filipinos, and if they do not come directly into increasing and eventual absolute homogeneity with the highly civilized Filipino type the fault will be of the latter. The more intelligent leaders of these Mohammedans and pagans have awakened to and the majority of the masses now have a glimmer of light as to the advantages and necessity for unity on a more comprehensive basis, without religious distinctions approximating national existence.

The reports of provincial governors are herewith inclosed.

Very respectfully,

F. W. CARPENTER,  
*Director.*

THE SECRETARY OF THE INTERIOR.

# REPORT OF THE SECRETARY OF PUBLIC INSTRUCTION.

JANUARY 1 TO DECEMBER 31, 1917.

DEPARTMENT OF PUBLIC INSTRUCTION,  
*Manila, P. I., March 20, 1917.*

SIR: In accordance with the provisions of section 91 of the Administrative Code of 1917, I have the honor to submit the annual report of the department of public instruction for the fiscal year of 1917, and to transmit therewith the annual reports of the director of the bureau of education, the director of the bureau of health and of the bureau of quarantine service, and the report of the superintendent of private schools.

The undersigned arrived in Manila on August 22, 1917, and assumed the active charge of the office of secretary of public instruction on the day next following. From January 1 to 14 of the year 1917, as also theretofore, the Governor General, under the provisions of law, conducted the Department. From the latter date mentioned until the date stated, when the undersigned began the discharge of the duties of office, Mr. Felix M. Roxas, the undersecretary of the Department, was the acting secretary in control.

On November 12, 1917, Dr. Alejandro Albert, assistant director of education, was appointed undersecretary of public instruction to succeed Mr. Roxas, who had resigned. At the same time Mr. Luther B. Bewley, the second assistant director of education, was appointed assistant director, and Mr. Camilo Oslas was appointed second assistant director to fill the vacancy caused by such promotion of Mr. Bewley.

Accompanying the reports of the two directors of the bureaus mentioned are numerous elaborate tables of statistics, and the texts of these reports cover, respectively, very completely the conduct of such bureaus. No attempt will be made to go into the details of the operation of these bureaus for the past year, nor to restate to any considerable extent the facts set forth in the reports mentioned. Since such facts are accurately and fully set forth by the two bureau directors of the Department, this report will avoid, to the extent possible, reiteration of the data submitted by them and will not undertake to go further than to set forth generally the status of the bureaus, their progress along such lines as show progress, and their needs and requirements.

## BUREAU OF EDUCATION.

With respect to the bureau of education it may be said that in all lines of effort it has made a steady and gradual progress, which has necessarily been limited because of the fact that during the past three years the amount of the appropriations granted had not been materially increased from year to year as in former years. It is the judgment of many eminent educators, never in any way connected with education in the Islands, that the system established and developed here surpasses in many respects that of any other country. Fortunately, the educational pioneers in the Philippines who advised the commission and department of public instruction were impeded by no traditions, customs, or prejudices when they took up the problem of planning a complete framework for the schools of the country. Furthermore, as defects became apparent or modifications, changes, and additions were shown to be desirable, the legislative power, concentrated as it was in a small body, acted quickly accordingly. Thus it was that a rapid evolution of the present system developed. It is very patent that it is marked by many features designed to meet the needs and conditions peculiar to the Islands. Thus, more than elsewhere, industrial education and instruction in handicraft has been emphasized in the primary schools. So, also, more than ordinary attention has been given to teaching the knowledge of the simple principles of agriculture, together with actual work in the care

and cultivation of vegetables and food plants. And of the latter it seems that agricultural instruction should be yet more intensified and broadened. But, aside from that, the principle of administration which runs through this bureau, which distinguishes it and gives to it unity of action and effort and accomplishes approximately the same results from the same methods and instrumentalities in all localities and schools, is embodied in that feature which fixes responsibility in the director at the head and makes his direction and judgment, guided by the advice of his administrative personnel, the controlling force. Generally speaking, in the United States the power of direction is so divided, scattered, and diffused that the value of the school work depends entirely upon the personality of the members of the local school board. Thus it comes about that in a given State there are some schools good, others bad, and others indifferent. Furthermore, such schools are under the immediate and entire control of local authorities, who are elected from various walks of life and generally without any experience whatever in school management or educational problems. Under such a system there is practically, therefore, no expert management. The State superintendents of schools of the various States are generally professional educators and, with exceptions, fitted for their official duties. But the scope of their official duties is so limited and their power so restricted that they are in reality mere figureheads, with little weight or influence and can accomplish little for the good of the schools. It should, therefore, be a matter of congratulation and of great satisfaction to the Filipino people that they have in reality, at the very least, as good a system of public schools as any other country.

But while the Philippines possess an excellent school system, with a trained and expert directing personnel, other facts make plain the dark side of the picture. It is true that only one-half of the children of the islands are in the public schools, and that for the reason that schoolhouses and teachers are lacking. Almost all of the schoolhouses are crowded to their utmost capacity, and some excessively so. Therefore it seems that wise statesmanship must provide at as early a date as possible the revenues requisite to provide sufficient schoolhouses and teachers to accommodate all the children of the islands with primary instruction at least. That every child has the moral right to a free education in a democratic government is a settled axiom. Nor can a democracy ever be safe with a large illiterate element, which constitutes a positive danger to the permanency of free institutions. Such a class can not know its full rights, nor, cognizant of the same, know how to protect them. Moreover, the illiterate are the constant tools of demagogues, who move and direct them to the constant injury of good government.

The situation just adverted to can be remedied only in one way. Inasmuch as the school revenues are insufficient, the existing tax system should be changed. Unless this is done without further postponement not only will approximately half of the children be compelled to continue to remain out of school and be deprived of their right to the benefits of an education, but the quantity, quality, and efficiency of the instruction given in the existing schools will be lowered. Several suggestions have been made to the Legislature which will afford partial relief. One deals with section 491 of the Administrative Code, which provides that there shall be set apart from the internal revenue 10 per cent as a provincial allotment, 10 per cent as a road and bridge allotment, and 20 per cent as a municipal allotment. Strange to say, however, this section contains a clause providing that such allotments shall not be greater for any year than the amounts allotted for those purposes in 1909. Thus although the requirements for revenues for these purposes have increased with the natural growth of the country, the revenues allotted by this rigid provision limit the amounts allowed to what was deemed necessary nine years ago. This anachronism is so patent on the face of the law that it needs only to be seen to realize at once that it should be stricken out of the section. The percentage rates could in such event be adjusted up or down, but the allotments to the Provinces should be increased to a total of 30 per cent and to the municipalities to 25 per cent of current internal revenues, with a provision that one-third of the provincial and one-half of the municipal portion should go to the increase of the revenues to maintain schools.

Another suggested modification of the statutes relates to section 345 et seq. of the Administrative Code. Section 345 provides that the proceeds of the real property tax shall be applied to the respective Provinces and municipalities wherein levied; that the share of the Province shall be levied annually by the resolution of the provincial board at a rate of not less than one-eighth nor

more than three-eighths of 1 per cent and the share of the municipality, likewise levied by the municipal council, at a rate of not less than one-fourth nor more than one-half of 1 per cent. Thus the maximum rate for all provincial and municipal purposes is seven-eighths of 1 per cent of assessed value. This rate for all purposes is about equal to the average rate for school purposes alone in the United States, and very frequently the rate there is 1 per cent exclusively for school purposes. And with this must also be considered the fact that the assessment of real property here in the island is very low, while in the States in some instances it is based on actual value. This comparison is made not in the sense of suggesting that the rates of a developed country should be reached at once, but that an effort should be made to approach it. I believe, however, it would be safe to say that no country which professes to have a system of free public schools levies as low a rate as that fixed here. And the same is true of the total tax rate of the Philippines. In America besides local rates the States in many instances give from one-fourth to one-third of all State revenues to the schools. Added to this, all the States have both State and county endowment funds resulting from specific congressional land grants and from the statute giving every sixteenth section of land to the public schools, to which are added all penalties, fines, and forfeitures, so that, as reported to me by the bureau, the relative ratio is ₱14 in the United States to ₱1 here. Comparisons are odious, but none the less necessary, and it is common in every enlightened country to measure accomplishment and progress by what other nations are doing in the same lines. It would certainly be very reasonable to increase the direct real property tax for the Provinces to a minimum of one-fourth and a maximum of one-half of 1 per cent and the levy of the municipalities to a minimum of one-half and to a maximum of 1 per cent. In this connection section 346 should be amended to make it conform to the amendments just suggested to section 345 with respect to the Provinces and to the municipal levy. Under this plan one-half of 1 per cent should go to the schools and 1 per cent to the general municipal fund. Section 347 should be changed accordingly to be in harmony with the preceding sections. This would be a very modest increase of the direct tax on lands, and the revenues which would thus accrue must be provided in that or some other manner or the school system, with the constantly increasing attendance, will lose efficiency and begin to fail. It is to be hoped that the expressions of these recommendations will at least result in apprising all in a public manner of the lack of sufficient revenues for the maintenance and natural growth of the schools and will afford a definite proposal for legislation to that end.

#### TUITION FEES.

Collateral to the need for more school revenues attention is called to section 924 of the Code, which provides in express terms that all primary instruction in the schools established under the chapter entitled "Bureau of education" shall be free. However, it is provided in section 2124 that for higher instruction the provincial board may, subject to the approval of the director of education, require moderate tuition fees. If the additional revenues recommended can be provided, it is to be hoped that the provision last mentioned as well as section 2250 relating to tuition in municipal schools will be repealed. The requirement of tuition fees is an anomaly in a free government such as this. It is not only undemocratic but is necessarily unjust and unfair. Its operation is such that the high schools and all other secondary schools, and more particularly the intermediate schools, which carry the fifth, sixth, and seventh grades, may be barred to the children of fathers who are unable to pay tuition fees. And yet such a father under the laws must pay a direct tax on his home, if he owns one, and the cedula or poll tax, besides, necessarily, the indirect taxation raised through customs and excises and passed back to him as an ultimate consumer. And, although the taxes he thus pays may be small, yet his children after the first four primary grades, may be barred at the doors of the intermediate or secondary schools, which he helps to maintain by his humble contribution, when, with a thirst for learning, they ask for a further education after completing the primary grades. This class distinction is most pitiful and unjust and certainly can not long meet with toleration. The schools should be absolutely free to all and there should be no artificial caste created by law which shuts the doors against the children of the poor and humble. Genius is the mark of no single class or order and most of those who have climbed to the heights have come up from the homes of the lowly. And should the door of

opportunity be shut against the children of the islands who have not the golden key to unlock it, no man can estimate the irretrievable loss to the spiritual, intellectual, and material interests of the land of those youths, touched by chill penury, in whom nature has implanted the divine fire or has fashioned in the mold to make of them captains of industry and commerce or leaders of men and pillars of the State.

#### NORMAL SCHOOLS.

At the recent session of the legislature there was included in the general appropriation bill, act No. 2727, a provision in an item of ₱500,000, which among other things, provided for the equipment and maintenance of additional normal schools in such amounts as the secretary of public instruction may fix for such purposes. Further in act No. 2736 carrying the appropriation for public works an item of ₱300,000 was incorporated for the sites and construction thereon of normal schools with the provision that this sum should be expended according to the judgment of the secretary of public instruction. The total number of graduates of the normal school located in Manila, in its entire history, is 615 regular graduates and 212 two-year domestic science teachers, whereas the present requirements of the public schools call for about 12,000 teachers. The paragraph referred to does not specify the number of normal schools, but the language used indicates more than one. So it would seem that two should be established although more are sorely needed. It is the understanding of the department that that was the general legislative intent and that one should be located in the Visayas and one in Northern Luzon. If these two normal schools, together with the one established at Zamboanga, can be brought up to the standard of the normal school at Manila, then the constructive work along this line may be said to be about half accomplished. The reports of the bureau of education show that during the past year there were 12,308 teachers employed in the public schools, and that 634 regular and 2,332 temporary teachers were appointed to fill vacancies from all causes and for new requirements. From the first number a few should be deducted, for it is not the real function of the normal schools to train teachers for the secondary schools. The university, through its college of education, should be looked to for most of the teachers in the high schools and other secondary schools. One defect in the personnel of the schools at present is that so few of the teachers have received an education equal or higher than that required for graduation in the high schools. Those receiving such secondary or higher instruction constitute only about 10 per cent of the total number of teachers. The total number of graduates of the Philippine Normal School engaged in teaching in the public schools is only 315, about one-half of the total graduates, or, roughly speaking, about 2½ per cent of all teachers employed. Thus it is self-evident that the single normal school at Manila, although in existence for years, can furnish only an inconsiderable part of the teachers needed. However, it is proper to say that, up to this time, the Philippine Normal School has been going through the necessary and customary period of development, and from now on will not only do more thorough work but will turn out an increased number of graduates. It would certainly be wise policy if the legislature would establish two more normal schools next year and continue until, at the very least, there will have been founded at least one normal school for every million of population. That, while not more than half the number usually provided in accordance with population in most of the developed countries of the world, would greatly strengthen the school system along lines where it is now weak. Further aid in this connection in training teachers for the primary schools could be obtained by establishing a normal course in more of the high schools. The method adopted in some States in America of paying the expense of normal teachers in high schools, which give such instruction, indicates the value of this method as ascertained by long experience there. Eight high schools in the islands, during the past year, gave normal instruction in this manner. Much has been and is being accomplished by our annual provincial normal institutes. A special appropriation should be made annually to provide better instruction in these institutes and increase their efficiency.

#### AGRICULTURAL SCHOOLS.

There are 124 schools in the archipelago giving a course in farming. Of these, nine are important agricultural schools. The school at Muñoz, in Nueva Ecija, known as the Central Luzon Agricultural School, is the best organized

and equipped in this latter group, and, in fact, has more students than the other eight combined, which are mostly non-Christian. The ideal to be worked to as an educational policy is to open and maintain in every Province a large agricultural school where practical methods given by daily training in actual farm work along with daily classroom instruction can be afforded. The total equipment of the Muñoz school is comparatively inconsiderable, and, moreover, the cost of the maintenance is, relative to other like schools in other countries, very small. New schools modeled after the Muñoz school can in many instances be allotted a large tract of Government land. When this is done and the land is partially cleared, and the few buildings and equipment necessary to start is provided, the students will subsist themselves with their own farm products, part of which can be sold, as has been done at Muñoz. Moreover, after a reasonable start is given other buildings, as their need presses, can be constructed by student labor in the manner accomplished at Muñoz. Each of these schools should specialize on the principal agricultural product of the district wherein located, just as the Muñoz school has given particular attention to rice. Thus schools respectively located in the tobacco, coconut, hemp, coffee, rubber, and other sections of the islands could largely concentrate on the leading product and thus constantly be turning out young men trained generally in practical agriculture and particularly in one product. The motto of the Muñoz school is "Learn to do by doing." And thus with this principle, that the student should learn to farm by actual farming, incalculable good could be accomplished for the chief resource of the islands, for none dissent from the proposition that agriculture is the base on which all other business, financial, commercial, industrial, and other interests must be supported. Moreover, since the last Legislature has established an experiment station at the college of agriculture at Los Baños, these provincial agricultural schools could furnish facilities, labor, and land to test out all theoretical inductions arrived at by research at the college and to that extent coordinate with the instruction in the higher agricultural institution.

#### TRADE AND SPECIAL SCHOOLS.

The system of trade schools has been very well developed so that good institutions of this kind are established in most of the Provinces, and in time such a school should be established in every Province. At Manila a complete school of arts and trades has long been established, but has suffered from a lack of housing capacity. This deficiency, it is expected, will be remedied during the current year by the erection of another new building. In this connection mention may be made of the fact that a site has been acquired on the bay in Pasay for the nautical school, and that a new building will be erected in time for occupancy at the beginning of the next school term in June. It is hoped that the next step in this line, which can be expected at the next session of the Legislature, will be the erection of a new building for the school of commerce, where the youths of the land are provided with a practical education for business.

The school of commerce is succeeding well in turning out competent stenographers and accountants. This school, however, does not possess the capacity to train more than a small fraction of those necessary to carry on the business of the islands. Those who are in great part to handle largely the business and commercial affairs of the land must necessarily get their education in its high schools. For that purpose thousands of young men, and young women also, will be needed and should be furnished by the hundreds every year. Complaint has been made that the important business of the islands is largely in the hands of Americans and Europeans. That is true and is partially due to the fact that they have capital in the first place and next are willing to take the risk of embarking it in business here. But inquiry would verify the fact that these Americans and Europeans were not persons of a limited education. On the contrary, most of them will be found to have had a good education as the necessary foundation of a business career, and quite a number of them are college graduates. The tendency in America is rapidly approaching the situation where the majority of the graduates of colleges and universities are going into agriculture and business. The old idea that higher education is of no value to the business man has long since been lodged in limbo. And so the numerous complaints voiced by many Filipinos over the control of business by foreigners must continue until the country provides the facilities for turning out raw material out of which to make business men. Such means to that end



are the high schools, and they should have an annual output of several thousand graduates every year whose intellectual faculties have been so trained as to be able to grasp and apply the principles of business. And yet there are men of influence and standing in the islands who openly advocate limiting the number of high schools so that there will not be more than one for every two or three Provinces. And there has been announced in print some astonishing statements in this regard. It has thus been said that every Province should have an intermediate school, one agricultural school, one industrial school, and one commercial school, where students who are not endowed with natural ability for the professions may pursue a practical course for two or three years. Also from the same source it was said that the grade average should be increased for admission to the high schools and that those who are unable to enter the high schools should be encouraged to enter the vocational schools of agriculture, industry, and commerce. This archaic notion that for entry into the law, medicine, and other professions more intellectual ability is required than is demanded in agriculture, industry, and commerce is out of date, and a relic of educational systems in backward or dying nations. To maintain that successful business men or farmers are a whit inferior to equally successful professional men in intellectual capacity or less capable of taking an education is to assert an idea long since discarded. In fact, it is contended by many of the highest educational authorities that more combined and all-around intellectual and practical ability is required in scientific farmers than is demanded in any other calling or profession in life. It is pleasing and encouraging to observe the enthusiasm of the people all over the islands to secure the establishment of high schools. The high school is the poor boy's college and when found at his door gives him at slight expense a fairly good education, some survey of the past, a knowledge of the laws of nature, a command of the English language, and the capacity of handling the mathematical calculations which constantly arise in every line of business and active life. The zeal of the masses and their eager desire to acquire these institutions speak highly for the Filipino people and indicate that with true instincts they sense what is best for them and the nation and what of right they ought to have. There ought to be no end to the establishment of high schools when circumstances and the revenues permit, and they should keep pace step by step with the growth of the population in the various cities of the islands. Nor, looking to the future, should there be any limitation put on this or any other class of schools. The attainment of the true ideal of the educational system of the islands will give as an inalienable birthright to every child born in the Philippines the privilege of an absolutely free admission to every school in the archipelago from the humblest barrio school to the university. Thus will be laid an unshakable foundation for a firm and stable Government of the people that will endure and continue with the other virile and progressive nations of the world.

#### LIBRARIES.

There are two general library systems in most countries, one providing by law for libraries to be under the control of the schools and the other providing that the municipalities shall have charge of such institutions. Unquestionably the former course is demanded by the peculiar conditions of these islands and such libraries as now exist are almost all founded and conducted by the schools. This is very proper, as there will be no considerable reading clientele outside of the schools until the present generation of school children and youths go out into the daily walks of life. Therefore, the establishment of school libraries in the schools brings them into direct contact with those who constitute the greater part of the readers. It would be of lasting value if some reasonable general appropriation could be made each year in aid of these libraries and to provide the slight cost of traveling libraries. Furthermore, these school libraries create and foster the reading habit in many children and thus create a thirst for knowledge which will cause those so affected to carry on more or less, through life, a love for books that will consequently continue their education and make them broader in their views and more capable citizens.

#### SCHOOL ATTENDANCE OF GIRLS.

One of the statistical tables prepared by the director of education shows that very approximately 38½ per cent of the pupils in the schools are girls, and 61½ per cent are boys. From this it appears, roughly speaking, that there are less

than 4 girls to every 6 boys in the schools. The proportion of girls in the primary grades to boys is about 21 to 32. The ratio in the intermediate grades is correspondingly 17 girls to 42 boys, and in the secondary schools 2 girls to 10 boys. Owing to the naturally preponderant attendance of boys over girls in the trade and agricultural schools, the above proportion in the secondary schools is not so marked as it appears at first glance. However, the status of school attendance, from the sex viewpoint, reveals the fact that much the greater part of the attendance is composed of boys, and that as the grades ascend, boys more and more predominate in numbers and the girls correspondingly diminish. These figures showing the relative sex attendance are, of course, to be regretted. In recent years not only educators, but all educated people and reflecting people of every line of endeavor, have come more and more to place special value on the education of the future women and mothers of the land. It can not be said that the education of either of the sexes is more necessary than the other. Different reasons exist for the education of the two sexes and, therefore, along certain lines in the ascending scale of instruction, the subjects taught begin to somewhat differentiate. Certainly, when we recognize the value of the educated mother of a family, as compared with the ignorant and superstitious mother, no one can depreciate the worth of instruction in public schools to girls, or dare to put a limit upon it. Such mothers have the care, custody of, and constant association with their tender little ones at a time when they are very susceptible to disease and heavy mortality, and when their receptive intellects are plastic to the contact of new impressions. Thus it is impossible to overestimate the value to the children of the land, and to the State of intelligent mothers who have been taught in the schools the principles of health, sanitation, and the rules and practice of the household arts, together with some knowledge of the sciences and literature. Such mothers will not only conserve the health of their little ones and assist in reducing the high infant death rate of the islands, but they will imprint on their minds a certain knowledge and culture and lay the foundations of character. Furthermore, they become fit intellectual companions for their husbands and, by their intuition and intelligent counsel, become true helpmates. It, therefore, should be the duty of this department to attract attention to this situation that it may be remedied to the extent and as early as possible. Across the dark shade cast by this table of statistics gleams at least a single ray of light. An accompanying statement shows a slight but steady rate of comparative increase in the attendance of girls as compared to the previous years. In the primary years in America the attendance of the sexes is equal. In the secondary schools the attendance of girls far exceeds boys, because the latter are impatient to engage in agriculture, industry, commerce, and business, and consequently, in large numbers fall out of the school ranks at or after reaching the high schools. In the universities and colleges, and necessarily in the technical schools, young men in America very largely exceed young women in numbers. No effort can be made by legislation to attain a greater attendance of girls, nor can the bureau bring about such an increase. It requires public sentiment, and that can practically be made by the educational instrumentality alone which teaches and instructs the people generally; that is, the press of the islands. The first step in this direction makes it necessary to remove an ingrained idea, inherited from the primeval men who were our ancestors, that the bodily strength of men was coincident with brain superiority. That archaic concept is passing in the nations of the world, and with accelerated speed, in those of the highest culture. The women of the Philippines, as compared with their sisters in other countries, are too reserved and do not enter so fully into those public and social activities for which they are so much better fitted than men. The free schools are gradually dispersing this feeling and sentiment, and to that and other desirable ends, the increased attendance of girls in the schoolroom will largely contribute.

#### ELEEMOSYNARY INSTITUTIONS.

No one thing is more characteristic of the civilization of this age, as compared to that of the ancients, than the care taken of the blind, the deaf, the insane, and the feeble-minded. The knowledge of the Greeks and Romans, with which our very languages are saturate and which survived the dark days of mediæval times and afforded the broad base on which modern learning and science is founded, was unmixd with compassion and humanity. Such unfortunates, until in recent times, seem never to have touched the hearts of men or incited the tear of pity. And so it may be rightly said that the surest mark of

a high civilization is the manner and extent which a people exercise in the care of those who have been deprived of their natural senses and powers of body or mind, and thus have become helpless, suffering objects of pity. The Philippine people have made a good beginning in this work of benevolence and charity, but the time seems to have come to advance a step. The deaf and blind are in the care of the bureau of education and the insane are in charge of the bureau of health, both in this department. The feeble-minded, for whom so much can be done, seem to have had as yet no special attention and care. The director of education states in his report that about 60 pupils were in attendance during 1917 in the school for the deaf and blind. The mention of that bare fact constitutes an indictment. In a land of probably 10,000,000 people only three score of its deaf and blind are receiving such instruction as will so greatly ameliorate their hard and pitiful fate and make them self-supporting, and much the happier for being so made. But what of the many others shut out from the light of day or from the sound of human voices, or those poor creatures deprived of the light of reason? Every sentiment of humanity demands more adequate provisions not only in housing but in instruction for these wards of the country. These afflicted should be cared for in separate buildings, and an attempt should be made to provide for them in other sections of the archipelago. When the situation is made known to the Filipino people their natural and characteristic sympathy and traditional care and kindness for their dependents and remote relatives, so much commented on in other countries, must react in a fine philanthropy which will call for the development of a system of oversight and instruction for such of our stricken fellow humans. The first necessary step would seem to be to establish two modest schools for each of the first two classes of such defectives of a considerably larger capacity than the present joint school, with the special aim of training some of those pupils who show the most alert intellectuality and a suitable disposition to be the future teachers of their fellow unfortunates in the coming days. The remainder should be taught the customary trades by which they may earn their own support. In this connection it may be suggested that these afflicted children be segregated away from the immediate proximity of the city, and, particularly in case of the deaf, have a considerable tract of Government land so that the institution, after being properly equipped, may be largely self-supporting. The boys in such institutions, as a general rule, should be educated to be practical farmers, and steps should be taken, when they have completed their instruction, to assist them to acquire homesteads from the Government lands by special legislative provisions. Furthermore, a beginning should be made in a colony for the feeble-minded along the self-supporting lines above indicated. With a medical expert, trained in this special subject, many of these unfortunates can, by surgical operation on the brain or skull, be entirely restored to reason.

#### TEACHERS AND SALARIES.

There is growing a general public sentiment that the teachers in the free public schools are very much underpaid. This fact has long been known to the officials of the bureau of education and persistently presented to the legislature and the public for relief. During last year, out of 10,873 municipal teachers, 6,756 received less than ₱25 per month; and of the latter number, 1,097 received less than ₱20. The average salary of municipal teachers is ₱23.98, and the average salary of all the teachers is ₱27. These men and women, in whose care there is committed the heavy responsibility of molding the minds and morals and instilling the rules for health of body of the coming generation, are actually put on a par with house servants and below day laborers. Low salaries to teachers always operate to demoralize the service. They occasion tempting offers of a financial increase of salaries on the part of business concerns, who thus strip the schools of the most efficient and talented teachers. And there is constantly borne in upon those who, full of zeal and enthusiasm, have embarked in this noble calling that their work is not appreciated and that justice is not done them in the amount fixed for their compensation. Thus many lose the ardor which inspires in this altruistic calling and resign from the schools when opportunities occur to better their condition from a financial standpoint. This situation should be given due consideration, and it seems highly advisable that the legislature should fix a reasonable minimum salary for permanent teachers.

#### AMERICAN TEACHERS.

The educational situation is made serious by reason of the fact that many American teachers are leaving the islands and returning to the States to pursue

their profession there. In addition, a number have gone into the service of the United States Army. It will be very difficult to supply such losses, particularly when the demand is not limited alone to the customary replacement. Besides that, there is springing up an additional demand for such teachers in the rapidly growing high and secondary schools, which are steadily increasing in the number in attendance and should increase in the number of such schools. Moreover, the two new normal schools will require a certain number of American teachers. The college of education of the university, recently established, is not yet in a position to turn out sufficient graduates to meet these demands. In course of time, however, it may be expected to discharge this function. When there is considered in this connection that the requirements of the war have taken thousands of men teachers out of the schools and into the armed forces of the nation, or those activities supporting and supplying such forces, thus largely increasing school salaries, it is apparent that we must do here what necessity has demanded in the States, and that is, the salaries for teachers brought to this great distance must be increased, promotions must be made more liberal, and a large number of women teachers must be secured.

#### PHILIPPINE HEALTH SERVICE.

During the year 1917 there were no serious epidemics.

#### CHOLERA.

Cholera was present throughout the year in the Provinces to about the same extent as in 1916.

A table showing cases and deaths in the Provinces and in Manila during the years 1916 and 1917 follows:

	Provinces.		Manila.	
	1916	1917	1916	1917
Cases.....	11,633	13,062	1,214	25
Deaths.....	7,473	7,960	513	8

Eighteen of the 25 cases in Manila occurred in the months of January and February, and represented the last of the outbreak of 1916. In spite of the number of cases that occurred in the Provinces the disease can not be considered as an epidemic one, as the cases were scattered in nature, and any tendency to outbreak was promptly controlled. The success had in controlling the disease in the city of Manila was due to the fact that more intensive work could be carried out in Manila than in the Provinces, and also to new factors discovered regarding the epidemiology of cholera. The discovery of two kinds of cholera organisms, the agglutinable and the nonagglutinable vibrios, led to the adoption of general measures which were productive of considerable practical results. It was also found from some cases discharged from the hospital, at intervals for a period of eight weeks thereafter, that cholera organisms were present in the stools, and the necessary measure of isolation was taken to prevent infection. However, this measure could not be carried out in the Provinces, due to the large personnel required to cover a vast territory. The ultimate solution of the cholera problem in the Provinces will depend largely upon the extension of water systems, the continued drilling of artesian wells, and the general adoption of a proper means of sewage disposal. Satisfactory progress in this direction was made during the year.

#### SMALLPOX, 1917.

A table showing the prevalence of smallpox follows:

	Provinces.	Manila.
Cases.....	539	3
Deaths.....	263	2

The cases that occurred in the city of Manila showed infection from the outside during the incubation period of the disease. An increase was noted in cases of varioloid, 129 cases having been reported, as compared with 62 cases during 1916, due probably to the weakening of the immunity given by the general vaccination of the city population about 15 years ago. Accordingly, vaccination was carried on rather extensively during the year and will be continued until the city has been once more completely vaccinated. As a result, 81,390 vaccinations were made. This work was also carried on more extensively than before in the Provinces, particularly those which were among the first to be vaccinated.

#### PLAGUE.

No case of either human or rat plague was reported in the Philippine Islands, the last case of human plague being that which occurred in 1914, and the last case of rat plague of chronic virulent type, in 1916.

#### TYPHOID FEVER.

A study of the causes of the disease was made by two commissions during the years 1916 and 1917, which showed practically the same results, that is, that the persistence of the disease is due to contact of persons with cases or carriers, especially with the former. There was apparently a slight increase of cases in 1917, which it is believed was due merely to increased regularity in reporting cases during the year, 348 being the number of cases reported as compared with 243 in 1916. The measures adopted to control the disease were prompt hospitalization of cases, blood and stool examinations within the vicinity of the case, and such other usual routine measures as relate to foods and disinfection. No epidemics were reported from the Provinces during the year, and the apparent increase in the number of cases is supposedly due to the increased interest manifested in its control, which brought about a more prompt and complete report of cases.

#### DIPHTHERIA.

Although reports of cases of diphtheria were received from the Provinces from time to time, no outbreak of the disease is known to have occurred. In Manila a decrease in the number of cases is shown as follows:

Year.	Cases reported.	Positive.	Deaths.
1916.....	164	114	30
1917.....	110	79	27

Fairly prompt reports of this disease were rendered and little opposition, if any, was manifested regarding isolation, disinfection, and other precautionary and preventive measures.

#### MEASLES.

A table showing cases of measles follows:

	1916	1917
Cases.....	310	237
Deaths.....	4	2

#### COUNCIL OF HYGIENE.

The council of hygiene held regular monthly sessions as required by law, and 14 special sessions. Routine matters were handled in the regular sessions and in the special sessions considerable attention was given to matters requiring legislation.

## FOOD AND DRUG INSPECTION.

The board of food and drug inspection held semimonthly meetings, at which numerous shipments of foods and drugs held at the customhouse pending action of the board were considered. A fairly large quantity of food products was condemned as being unfit for use. Five administrative decisions were issued under the food-and-drugs act, and a standard was adopted for salt manufactured in the Philippine Islands. Seven convictions were obtained for violations of said act.

## PROVINCIAL CEMETERIES.

During the year 1917, 75 new cemeteries were approved; 98 were reported as sanitary as against 44 in 1916; and 67 were reported as insanitary as against 124 in 1916.

## HOSPITALS.

In accordance with Act No. 2725 the Southern Islands Hospital was separated from the Philippine health service on January 1, 1918, and placed under the control of the Philippine General Hospital. One new hospital was opened at Albay, Albay. Bohol, Pampanga, and other Provinces have hospital projects under consideration. The operation of the hospitals generally was satisfactory and economical, and the attendance was greater than that in the previous year. The activities at San Lazaro were increased by the construction of a new tuberculosis hospital, with accommodations for 125 patients, and the construction of a home for the aged and infirm, with a capacity of 50 patients. The tuberculosis hospital was built by the service of sanitary house material in 63 working days, at a cost of ₱23,000. Construction work has also been begun by the bureau of public works on a concrete building for use as a ward for female insane. When this building is completed, facilities will be available for about 150 to 200 more insane patients.

## SANITARY WORK IN THE PROVINCES.

In accordance with section 1002 of Act No. 2711 the Provinces of Isabela and Tarlac were organized into sanitary divisions, and the Province of Misamis extended its partial organization with a view to its completion. Preliminary steps toward the organization of the other Provinces, excepting Cavite and Bataan, were completed, and it is expected that these organizations will be perfected during the beginning of 1918. The number of nurses doing public-health work in the Provinces and maintained at provincial expense was increased to 39. Data show that 56 new dispensaries were opened during the year, which will bring relief to 127,000 more persons. Four new provincial laboratories were opened, so that a majority of the Provinces are now provided with laboratory facilities. Cases of rabies were reduced, and prophylactic treatment was more extensively used. In Albay, formerly the worst focus of the disease, no deaths occurred. Approximately 18,000 stray dogs were killed. The number of municipalities having approved ordinances requiring the installation of the Antipolo sewage system, or better, was increased to 193, and the number of Antipolo system privies used has reached 42,314. It is believed that the movement will show a very large increase during 1918. Three gravity water systems were installed, as follows: Calapan, Mindoro; Bani, Pangasinan; Magallanes, Sorsogon. Three others are under way in Bohol and Antique. One hundred and twenty-nine artesian wells were drilled. The foregoing statements relative to the installation of Antipolo systems and water supplies indicate that 200,000 additional residents of the Provinces are now provided with sanitary toilets and 150,000 are provided with safe water that have not heretofore had such facilities.

## SANITARY COMMISSIONS.

During the last two years in which the commissions were in operation 13 towns were surveyed and 9 were resurveyed, resurveys being made, as a rule, one year after the survey. Of the nine resurveys four showed a reduction in the death rate, the largest reduction being from 37.52 to 29.93 per thousand.

The work of the sanitary commissions was largely effective in controlling the mortality of children under 1 year of age. To this work is also due the development of the Antipolo sewage system and the sanitary house. Of future

benefit and with far-reaching importance will be the installation of a system of health organization in sanitary divisions, designated "the automatic health organization," which consists of a series of maps, curves, charts, card indexes, and cross indexes based upon data obtained through the work of the sanitary commissions. This type of health organization enables the health officer to know at once what particular factor is bringing about an increase in morbidity or mortality and the probable origin of the infection and with a little more detailed investigation to locate the cause with certainty. The system will be tried out during this year, and after making the necessary corrections the same will be applied generally throughout the archipelago. It is to be regretted that the appropriation act for the current year does not provide for the continuance of the work of the sanitary commissions, the activities of which have necessarily ceased as of January 1, 1918.

#### TUBERCULOSIS.

Data show that of an estimated population of 10,000,000 in the islands 26,400 people die of tuberculosis yearly, which shows a death rate from this disease of 2.64 per thousand. The death rate of the Philippine Islands ranges from 45 per thousand in 1902 to 24 per thousand at the present time. In 1902 tuberculosis constituted about 9 per cent of the total mortality and at the present time it constitutes over 21 per cent. The foregoing statement shows the absolute necessity of further and more effective action to bring this disease under a more complete control. To further delay such action is dangerous. It is agreed by the most eminent medical and sanitary authorities that tuberculosis is curable if properly treated in the early stages. The existence of the disease in a suspect is easily ascertained by a simple microscopic examination of the sputum or by a tuberculin test and physical examination. Seeing that the general conditions of the islands afford a fertile field for this disease and that the conditions of the houses of the poor in thickly settled districts conduce to its propagation, it becomes imperative to take preventive measures even more stringent than those applied in other countries. If the present mortality from tuberculosis continues to increase at the present rate, it will before long assume the condition of a scourge or plague. Even now, due to the fact that the germs may be wind borne, no one is free from the menace of this dread complaint. Some attempt should be made to provide a sanitary colony for those who can not be maintained in sanitoriums. The latter, according to the experience of all other countries, should preferably be located in the pure air of the mountains, avoiding, however, excessive altitudes. If the Philippine health service can receive the necessary funds, it can succeed, just as it has in the case of cholera, the bubonic plague, and other diseases, in reducing this disease to a minimum. Indeed, the highest medical authorities maintain that tuberculosis, by proper precautions and efforts, rendered possible by public appropriations, can be completely eradicated from any community.

#### OFFICE OF HYGIENE AND INDUSTRIAL DEVELOPMENT.

A model sanitary house was demonstrated at the carnival of 1917 and was visited by more than 149,000 people.

Fifty-four additional women's clubs were organized during the year. A noteworthy feature of this development is the enthusiastic campaign now undertaken by some of these clubs for the protection of early infancy. To carry on this work 28 "centros de puericultura" were incorporated, 8 of which were allotted insular aid under the provisions of Act No. 2633. Seventeen baby contests were held and 33,778 promises for the establishment of home gardens were received, an increase of 19,380 over that of the previous year.

#### DISTRICT NURSING.

The district nursing division has continued its visits from house to house for the purpose of improving the hygienic conditions of homes and has succeeded in gaining the confidence of the people. The value of these visits is now appreciated and an increasing number of requests for advice and instruction have been received. This division assisted largely in the organization of women's clubs in provincial towns, has assisted in baby contests, has had charge of exhibits at various town fiestas, has distributed large numbers of circulars

on health subjects, and has given a great many demonstrations in the preparation of balanced diets. A total of 12,884 domiciliary visits was made.

#### PROPERTY OFFICE.

The property office, in addition to a number of requisitions, has issued 1,253,410 units of vaccine and has received and passed interbureau vouchers and bills of a value of ₱310,182.62.

#### MINDANAO AND SULU.

Inasmuch as the central office of the bureau of health has not yet received data from the Department of Mindanao and Sulu, Cullon, Cuyo, and some of the other outlying stations, due to their distance from Manila as well as the irregularity of communications at the present time, the report of the director of health is not complete and the undersigned, therefore, is only able to state in this report comparatively little of what was done along this line in those places during 1917. However, upon receipt of said data the undersigned will see that the same will be embodied immediately in his report.

It is interesting to note that in general satisfactory progress has been made in health and hospital work in the Department of Mindanao and Sulu, and several new hospitals have been opened and others begun. It is expected that the activities of the Philippine health service will be considerably extended in the Department of Mindanao and Sulu by the conversion of the Coast Guard cutter *Busuanga* into a hospital ship in December of last year, in accordance with the provisions of Act No. 2513 and with funds provided by the Rockefeller Foundation. The operation of the hospital ship will give considerable relief to the inhabitants of Sulu, who have had no adequate medical attendance and have lacked proper facilities for nursing the sick.

#### SUMMARY.

Upon the whole the work of the service has progressed very satisfactorily during the year, especially good results having been obtained in water supplies and sewage disposal, in the formation of women's clubs and other societies for the protection of early infancy, and in the sanitary organization of the various Provinces.

The Daily Bulletin, begun in June, 1917, met with almost immediate popular approval, and many favorable comments were made by both the press and the public, the most notable being one made at the joint meeting of the Colegio Medico-Farmacutico and the Philippine Islands Medical Association. Numerous requests have been received for missing numbers, thus demonstrating the desire that exists for education in public-health matters.

#### BUREAU OF QUARANTINE SERVICE.

This bureau is an integral part of the national quarantine establishment of the United States Government, and commissioned medical officers of the United States Public Health Service are detailed in the Philippines to carry into effect existing laws covering quarantine, immigration, and the prevention or spread of epidemic diseases. Inspection stations are maintained at all ports of entry, and two detention and disinfection stations for the treatment of personnel and vessels are operated, one at Mariveles for the northern islands and one in the island of Cauti, in Cebu Harbor, for the southern islands.

#### ACTIVITIES.

The activities of the bureau of quarantine service fall into certain divisions, which may be classed as (1) incoming or national quarantine; (2) outgoing or consular quarantine; (3) interisland quarantine, both incoming and outgoing; (4) medical inspection of immigrants; (5) sanitation of interisland vessels and ports; (6) physical examinations of applicants for marine licenses and other government positions; and (7) miscellaneous duties not included in the preceding classes.

Incoming or national quarantine consists of the inspection of vessels arriving in the islands from foreign ports. This is of continuous necessity in order



to prevent the introduction of communicable diseases from abroad into the Philippine Islands, which are at a short distance from some of the world's greatest foci of such diseases. The arrival of vessels from foreign ports within the incubation period of many of the quarantinable diseases, together with the steady development of commerce in bulk and in territory, adds to the necessity of quarantine surveillance. However, during 1917 conditions were more favorable than in previous years. It is gratifying to note that although a number of cases of quarantinable diseases were detected upon inspection, there occurred no known case of any such disease in the Philippine Islands which was directly or indirectly traceable to introduction from abroad, and that in carrying out quarantine measures the desired results were obtained without unnecessary interference with commerce due to the detention of vessels and persons at the various quarantine stations.

Practically all the quarantinable diseases, with the exception of yellow fever, were encountered upon inspection at all the ports of entry, and the necessary treatment was rendered and precautions taken. While a number of cases were taken to our hospitals and treated, no further transmission of the infection could be traced. The crews and steerage passengers from abroad were vaccinated, and stool specimens were taken from those arriving from cholera centers. As a result, 18,778 persons were vaccinated. Special precautionary measures were taken to prevent the introduction of plague, which has been severe in several districts in China and the Orient, but which has been successfully kept out of the Philippines.

The consular quarantine function is performed in the Philippines by this bureau in the same manner in which it is carried out by American consuls stationed at foreign ports. The islands are not a menace at present to the continental United States, but being in the Orient, where unsanitary conditions have existed in the past, there had to be imposed certain restrictions to meet the sanitary demands of the home Government, and in order to insure a constant observance of the law, and thus safeguard importations into the United States. General statistics in this connection are as follows:

Bills of health issued.....	342
Crew inspected.....	21, 652
Passengers inspected:	
Cabin.....	7, 130
Steerage.....	18, 011
Pieces of cargo inspected and certified.....	3, 766, 514
Vessels disinfected and fumigated.....	81
Vessels inspected.....	256

All vessels coming from plague-infected ports and, in fact, all vessels making the Philippines a regular port of call were fumigated, to reduce to a minimum the number of rats and fleas, together with such other insects as infest vessels. Vessels were disinfected at all stations, on account of quarantinable diseases having occurred on board, and also on account of other communicable disease having made its appearance on the vessel. During the year this bureau has continued its survey work for the detection of cholera carriers. It continued stool examinations of arriving aliens, to determine whether they were afflicted with hookworm. There were 5,070 specimens examined, with the usual percentage of hookworm and other intestinal parasites, but no cholera carriers were detected.

A general systematic sanitary inspection of interisland vessels has resulted in some slight improvements commensurate with the limited facilities of the bureau.

#### GENERAL.

This bureau was able to cooperate with a number of other bureaus of the Philippine Government, such as the inspection of meat certificates, the examination of applicants for admission to the nautical school, maintenance of lights for navigation purposes treating sick Government employees, assisting in the biological work of the bureau of science, assisting in the free dispensary work of the Government, disinfecting vessels which had carried cattle for the bureau of agriculture, and furnishing transportation and assistance in the collection and diagnosis of lepers and the disinfection of small boats for the Philippine health service.

As a daily routine at all of the ports of entry inspection was made of the water front, piers, and the anchorage of vessels, for the purpose of maintaining the strictest sanitary measures possible under the circumstances.

The general equipment of the service has been kept in only fair condition. Appropriations for repairs were not available and deterioration is extremely rapid. The bureau did its own repair work as in the past, but with practically no materials very little real work could be accomplished. One launch was overhauled and is now in fairly good condition.

Inspection of allens arriving in the Philippines was conducted by the medical officers of the quarantine service, a work which showed a considerable increase of arriving allens. Only arrivals presented by immigration officials were examined.

#### CURRENT APPROPRIATION.

Owing to the unprecedented increase of prices ₱10,924 was asked of the emergency board, in addition to the sum of ₱113,721 appropriated for the year. Of the total of ₱124,645, ₱117,588.88 was expended, leaving a balance of ₱7,056.12 to revert to the treasury.

In the estimate for the public-works appropriation ₱50,000 were included for this bureau, no part of which was appropriated, and no funds for public works and permanent improvements were made available, except a small sum expended by the bureau of public works in repairing the fender system of the Mariveles wharf.

#### NEEDS.

An annual appropriation of ₱30,000 for several years is needed for reconstruction and repair of the light material buildings at the Cebu and Mariveles quarantine stations. The buildings at Cebu have already outlived the term for which light-material construction can be expected to serve, and are now at the mercy of any ordinary typhoon, which may occur at any time and demolish them completely. Another appropriation of ₱40,000 is also absolutely necessary for the purchase of a boarding launch for use in Manila Bay, to replace the old one now used, which can no longer be expected to be safe during the rough weather prevailing here a great part of the year. A request for funds for this purpose made upon the last Legislature failed to receive favorable consideration.

The financial statement for the current year is as follows:

#### *Financial statement, Bureau of Quarantine Service, fiscal year 1917.*

##### General current appropriation:

##### Debits—

Appropriation for fiscal year 1917, Act 2672.....	₱113,721.00
Appropriation by emergency board.....	10,924.00
<b>Total .....</b>	<b>124,645.00</b>

##### Credits—

Expended during fiscal year.....	117,588.88
Unexpended balance reverted to treasury.....	8,869.50
Deficit due to auditor's disallowances.....	1,813.38
<b>Total .....</b>	<b>124,645.00</b>

<b>Total expenditures: Funds, current appropriation, fiscal year 1917.....</b>	<b>117,588.88</b>
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##### Collections:

Collections for the year.....	925.42
Amount deposited in the treasury to the credit of unappropriated surplus .....	945.42

##### Expenditures during fiscal year 1917:

##### Fixed assets—

Vessels and launches equipment.....	₱115.22
Land transportation equipment.....	465.33
Machinery.....	306.80
Portable machinery and tools.....	173.34
Furniture and fixtures.....	428.53
Scientific equipment .....	8.08

**1,497.25**

## Expenditures during fiscal year 1917—Continued.

## Administration—

Salaries and wages.....	P81,354.51	P81,354.51
Traveling expenses of personnel.....	1,440.72	
Freight, express, and delivery service.....	320.00	
Postal, telegraph, and cable service.....	614.47	
Miscellaneous service.....	128.97	
Rentals, buildings and grounds.....	960.00	
Consumption of supplies and materials.....	24,100.66	
Printing and binding publications.....		
Maintenance and repair service.....	7,172.30	
		34,737.12
Grand total.....		117,588.88

Complete statistical information can be seen attached to the report of the chief quarantine officer for the Philippine Islands.

## PRIVATE SCHOOLS.

It is made the duty of the secretary of public instruction, by law, to maintain a general standard of efficiency in all private schools and colleges in the archipelago, and for this purpose the secretary is authorized to inspect such schools and colleges either in person or through his authorized representatives. He is further authorized to make the necessary regulations for carrying out the law, and to issue certificates of Government recognition to such schools and colleges as have complied with said regulations, reserving the right to annul the same whenever it is found that they do not maintain the standard required by the department.

The year 1917 has been a year of progress for the private schools. The number of recognized institutions has increased from 180 to 222. Of these 104 are primary schools, 69 intermediate schools, 33 high schools, and 15 colleges. Of the technical schools on the approved list there are 5 law schools, 1 medical school, 2 schools of pharmacy, and 1 dental college. The total enrollment of these schools has increased from 21,271 to 28,830. There are now 17,555 attending the primary schools, 4,923 attending the intermediate schools, 4,211 attending the high schools, 606 attending colleges, and 1,535 attending the technical schools. English continues to be emphasized.

The courses offered in all the primary and intermediate schools are the same as those given in the public schools, and the same textbooks are used. The larger number of the secondary schools have also the same course of study as the Government schools. The new course of study in English prescribed by the bureau of education for secondary schools has been adopted, with very few exceptions, in all the private high schools.

Industrial education has been greatly emphasized. Two years ago it was very difficult to make boys who paid for their tuition devote part of their time to industrial work, but the value of such work has been gradually inculcated in their minds until at present it has been introduced and is in successful operation in most schools. Enthusiasm for general and specialized athletics increases every year, and field games have become frequent occurrences. A friendly rivalry exists between the different schools and colleges. Military instruction has also been introduced in the larger institutions.

The previous system of transfer between public and private schools and between private schools has been modified, and the rules and regulations governing transfers are now along the same lines as those adopted by the bureau of education. The system of report cards now obtaining in the Government schools has been adopted by all recognized private schools. Complete records of work done by each pupil are kept in all schools.

For the last two years admission has been granted each year to the Government normal institute to 15 teachers from the private schools. These schools would like to send at least 50 of their teachers to this institute each year, and every possible effort should be made to meet this request. It is encouraging to note that the Belgian Fathers in the Mountain Province are preparing to open a five weeks' normal institute at Tagudin for some 60 of their teachers. The same priests in Manila will hold one here for the teachers of their schools.

The private schools are desirous of obtaining bureau of education publications. In view of the fact that these are very helpful, and that it is very much

to be desired that the private schools, particularly the primary and intermediate grades, be conducted in the same manner and along the same lines as the corresponding public schools, these publications should be put within their reach.

Since the Government is at present only providing schoolhouses and teachers for one-half of the children of the islands, every effort by any religious sect or by any private person or association of private persons to establish and maintain schools should be welcome. With half of the children of the country deprived of an opportunity to get an education there is a pressing demand not only for more public but also for more private schools.

Complete statistical data are attached to the report of the superintendent of private schools.

#### UNIVERSITY OF THE PHILIPPINES.

While the secretary of public instruction is ex officio chairman of the board of regents, it is not considered that that institution has any connection whatever with the department of public instruction. The president of the university will very shortly send to the Governor General the last annual report of that institution.

#### PUBLIC-WELFARE BOARD.

The public-welfare board was never a part of the department of public instruction, but the secretary of the department was ex officio chairman thereof. This board has carried on its activities along the same lines as in the past, with the exception that its work has been reduced to a certain extent due to the passage of the Jones law. Under the provisions of the new organic act, sectarian institutions which prior to the enactment thereof were receiving Government aid are deprived of such aid, thus forcing the board to discontinue its relations to several charitable institutions. However, to continue custody of the various beneficiaries formerly taken care of in sectarian institutions, a reasonable amount of money was appropriated by the Legislature. The old board, in view of its large and cumbersome organization, requested that it be radically reduced in size, a salary provided for the secretary, the powers of the board more fully defined, and that the board be transferred to the department of the interior, to which it more properly belongs. This was done by the Legislature at its last session by Act No. 2745, and the secretary of the old board has made an annual report for the past year, which is herewith transmitted.

In this connection mention should be made of the fact that the baby shows held in 1915 were repeated last year with success, and a great benefit was derived from such contests. The activities of the clean-up week, which were successfully carried on with the cooperation of the public schools and other governmental agencies, particularly provincial and municipal authorities, are also worthy of mention. Still another feature of the board that should be brought out is the competition for the best essays on civico-educational lectures, for which prizes were offered. Prizes were also given to the best equipped provincial school libraries and playgrounds.

Judging from the interest and enthusiasm displayed and the influence which they exert upon the community, one can readily see that the usefulness of the board is beyond question.

Respectfully submitted.

CHARLES E. YEATER,  
*Secretary of Public Instruction.*

The GOVERNOR GENERAL.



# REPORT OF THE SECRETARY OF FINANCE.

JANUARY 1 TO DECEMBER 31, 1917.

DEPARTMENT OF FINANCE,  
*Manila, April 29, 1918.*

SIR: I have the honor to submit the following report of the work of the department of finance for the fiscal year ending December 31, 1917:

Peculiar conditions created by the world war found no exception in the Philippine Islands, where the shortage of tonnage for domestic and foreign trade has created difficulties in the otherwise prosperous status of the country. The balance of foreign trade from 1899 to the close of 1915 was against the Philippines to the amount of ₱37,621,183, but the year 1916 left a net balance in favor of the islands amounting to ₱11,260,507, which rose to ₱70,875,059 for the year corresponding to this report. With the exception of the sugar sections, unprecedented prosperity prevails throughout the country, bringing with it the awakening of agricultural, commercial, and industrial enterprises and the rise in wages.

The circulation, which had suddenly risen from ₱51,284,906.76 in 1915 to ₱67,059,189.04 in 1916, took on a still larger increment in 1917, reaching ₱102,580,313.57, an increase of ₱35,521,124.53, or 53 per cent, more than the circulation of the preceding year. The standard gold fund amounted to a little over ₱13,000,000 only, of which about ₱10,600,000 were invested practically in long-term loans, leaving only about ₱2,400,000 in cash. This fund was plainly insufficient to meet the enormous expansion of the monetary circulation, but resort was had to the authority conferred upon the insular treasurer by the act of Congress of July 23, 1906, to substitute gold coin of the United States for a part of the silver-certificate reserve fund to an amount not exceeding 60 per cent of the total reserve. Silver certificates were issued secured by gold deposited in the banks of the United States to the credit of the certificates' reserve fund. The National Bank of the Philippines and the Bank of the Philippine Islands likewise increased their issue of bank notes to a total amount of ₱4,296,030.

It was very quickly seen that the maximum limit authorized for the amount of coin in the reserve fund was not sufficient. The alternative was presented of exceeding such limit or of issuing temporary certificates of indebtedness wherewith to purchase silver to coin into money. The very high price of silver and the condition of the bond market, which because of the war was unfavorable to the issue of certificates of indebtedness, made the second proposition entirely unacceptable, and after careful consideration of the question the insular treasurer was authorized to keep a gold reserve fund considerably in excess of the maximum limit permitted by the act. The silver certificates issued up to the end of the year amounted to ₱70,137,150, against ₱42,750,000 of the previous year, representing an increment of ₱27,387,150. The reserve fund is composed of ₱13,387,150 in silver pesos and ₱56,800,000 in gold coin of the United States, this last sum constituting 81 per cent of the total reserve.

Consequent to the expansion of the circulation there was a great demand for subsidiary coins. The treasury was unable to obtain from the United States mint in San Francisco the adequate amount of fractional coins to supply the necessities of trade. The situation became very embarrassing, especially in the city of Manila and the neighboring Provinces, where by the middle of September they got to discounting the silver certificates at 10 per cent with the object of obtaining fractional currency. Fortunately, the national bank was authorized to issue bank notes of any denomination, guaranteed by a like amount of reserve in gold, to obviate the lack of authorization of the insular treasurer to issue bank notes of less than ₱2. With the cooperation of the national bank, emergency notes were issued in denominations of ₱1, 50, 20,

and 10 centavos up to the amount of ₱2,700,000, in this way remedying the embarrassing situation of trade, which by the middle of October returned to its normal condition.

Along with the scarcity of subsidiary coins came the rise in price of silver, which reached 55 peniques per ounce in the month of September. This gave the Philippine peso a value in silver bullion of ₱1.22, which offered a very tempting inducement for speculation. However, the precautions taken in the customhouses and the issue of bills of ₱1 by the national bank succeeded in preventing the clandestine exportation of Philippine pesos, although it is not improbable that small quantities may have been exported.

These events have made more imperative the revision of the currency law of the Philippines which was already under consideration some time ago, and to this end the Arroyo bill was introduced in the Legislature which included all the existing laws relative to the monetary system of the Philippine Islands with the amendments counseled by experience. These amendments consist principally in the authorization given the executive power to order the reduction of the standard of the Philippine coins; the authorization to issue ₱1 notes; the consolidation of the gold-standard fund and the silver-certificates reserve fund into a single fund called the currency-reserve fund, and the abolition of the limit fixed for the amount of gold coins to be kept in the reserve fund. This bill was approved by the Philippine Legislature and by the Governor General in February, 1918, and is now pending approval of the President of the United States.

The public treasury is now in fine shape. It commenced the year 1917 with a current surplus of ₱15,032,159.33, and ended with a balance of ₱24,404,683.03. The receipts of the Government from all sources were ₱54,781,241.44, against ₱45,704,855.69 the previous year; that is, an increase of ₱9,076,385.75. The largest increase in the receipts consisted principally in import duties, excise tax, taxes of merchants, manufacturers and shippers, income tax, and United States internal-revenue tax collected in these islands and covered into the insular funds.

Disbursements amounted to ₱45,408,717.74, against ₱40,906,813.13 for 1916; that is, an increase of ₱4,501,904.61. The increase in disbursements consisted principally in those for the National Guard, of new creation, the constabulary, which had to replace the forces of the Regular Army of the United States withdrawn from Mindanao, the food campaign, the campaign against rinderpest, retirement pay of employees, and aid to local governments.

Laying aside other details which will be better handled in the report of the insular auditor, I will take the liberty of mentioning here that the largest expenditures of the insular Government during 1917 were:

Aid to local governments.....	₱8, 879, 812. 13
Public instruction.....	4, 878, 207. 76
Public works.....	3, 952, 291. 45
Maintenance of law and order.....	3, 729, 336. 45
Sanitation service.....	2, 114, 650. 46
Promotion of agriculture.....	1, 719, 692. 87
Promotion of commerce.....	1, 690, 433. 63

Appropriations made by the Government in aid of local governments becomes greater each year, the increase being ₱2,888,923.87 in 1917 over the appropriations for 1916. This increase clearly reveals the great development taking place in provincial and municipal governments, whose resources are limited and not very elastic, and a revision of the distribution of taxes now prevailing in the country is called for.

An event of much importance in the public treasury of the Philippine Islands was the inauguration of a budget system in which effort was made to profit by the experience of the most progressive countries. The Jones bill provides that:

"He [the Governor General] shall submit within ten days of the opening of each regular session of the Philippine Legislature a budget of receipts and expenditures which shall be the basis of the annual appropriation bill."

Pursuant to this provision the Governor General, upon recommendation of the cabinet, promulgated an order prescribing a well-defined procedure for the preparation of the budgets. The chiefs of bureaus and offices prepared their estimates of expenses during the month of July on forms prepared by the secretary of finance. The expenses had to be clearly and specifically itemized, being submitted later to the head of the respective department. The heads of departments minutely analyzed and discussed these estimates with the chiefs

of bureaus and prepared their estimates of departmental expenditures, which were submitted to the secretary of finance. The latter examined and summarized them, calculated the receipts, with the help of the insular auditor, and prepared the budget containing the comparative statement of the receipts and expenditures of the coming year, those of the current year, and those of the previous year. The budget thus prepared was submitted to the common action of the cabinet, where the secretary of finance introduced his amendments to the portions he deemed objectionable, and, once revised and harmonized throughout, it was submitted to the Governor General, who transmitted it, with a special message, to the legislature through the secretary of finance. The secretary of finance appeared before both houses assembled in joint session to read the message of the Governor General and to explain the items of the budget. Both houses voted to accept the budget in the main, and it was referred to the committee on appropriations of the house of representatives for more careful study and the preparation of the appropriations bill. During the deliberations the secretaries of departments appeared to explain any point in the appropriations corresponding to their respective departments upon which any clarification was desired. Upon the approval of the bill by the lower house it was transmitted to the senate where it underwent another revision before being approved.

The legislature passed the appropriations bill for 1918 without increasing the amount of any of the allotments in the budget of the executive. While the legislature did not adopt any definitive rule as to the conduct to be observed in the approval of the budgets, the action taken thereon is indication of a tendency toward correct procedure, which constitutes one of the most important aspects of a good budget system.

With the adoption of the budget system the government has introduced into the administration of the public treasury a highly beneficent reform. It thereby succeeds in having an economic and financial program where unity, coordination, and equilibrium in the activities of the government predominate. The responsibility for the preparation of the budget is placed where it should be, on the executive, who, in asking funds from the legislature, renders account thereto for the use made of the credits granted in the previous year.

"But this is not the only advantage of this system," said the speaker of the house of representatives. "It inaugurates a régime of publicity and places each power of the State within its own sphere of responsibility. It fixes the economic administration of the Government within tested financial methods and connects the direct examination of the necessities of the country with the authorization and duty of expending public moneys with economy and efficiency. It makes the chiefs of departments more responsible to the legislature and to the people. It frustrates all attempt to establish a vicious process of legislation not required by public necessities, known elsewhere as 'logrolling' and 'pork barrel.' It maintains the legislature within a sphere of dignity and control, while it stays the hand of an arbitrary chief executive who might be disposed to unduly exercise the veto. And, what is most important of all, it conserves fresh and pure the constitutional understanding between the various powers of the State and between the Government and the people. It prevents unnecessary expenditure of energy because of irritation and friction, and, whilst it maintains stability, it keeps the forces of government constantly prepared for action—action that must be orderly, prompt, and efficacious."

Below is given in detail the transactions of the bureaus under the department of finance for the year 1917.

#### BUREAU OF THE TREASURY.

##### GENERAL TREASURY FUNDS.

The following statement shows the movement of funds in the insular treasury during the fiscal year 1917:

##### General treasury account:

Balance on hand Dec.

31, 1916..... ₱11, 915, 787. 85

##### Receipts—

Cash deposits..... 88, 012, 343. 33

Currency exchanges..... 95, 876, 125. 54

Total..... ₱195, 804, 256. 72



# 106 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

## General treasury account—Continued.

### Expenditures—

Cash withdrawals... ₱83, 228, 286. 97  
 Currency exchanges 95, 876, 125. 54

Total ..... ₱179, 104, 412. 51

Balance on hand Dec. 31, 1917..... ₱16, 699, 844. 21

### Depository account:

Balance on hand Dec.  
 31, 1916.....

₱16, 038, 782. 77

### Deposits—

Treasurer of United  
 States..... 45, 100, 470. 36  
 United States dis-  
 bursing officers... 70, 518, 591. 25  
 Insular disbursing  
 officers 91, 546, 744. 50  
 Philippine National  
 Bank redemption  
 fund..... 2, 500, 000. 00

Total..... 225, 704, 588. 88

### Withdrawals—

Treasurer of United  
 States..... 45, 130, 777. 66  
 United States dis-  
 bursing officers... 72, 303, 876. 40  
 Insular disbursing  
 officers 82, 284, 088. 23

Total..... 199, 718, 542. 29

Balance on hand Dec. 31, 1917..... 25, 986, 046. 59

### Silver certificate reserve ac- count—

Balance on hand Dec.  
 31, 1916.....

₱42, 750, 000. 00

Certificates issued..... 36, 990, 000. 00

Total..... 79, 740, 000. 00

Certificates retired..... 9, 602, 850. 00

Balance on hand Dec. 31, 1917..... 70, 137, 150. 00

Total funds for which insular treasurer was accountable  
 on Dec. 31, 1917..... 112, 823, 040. 80

This balance of ₱112,823,040.80 was distributed as follows:

### Distribution of funds.

	United States currency.	Philippine currency.	Philippine currency.
In treasury vaults.....	\$826, 734. 23	₱14, 947, 107. 89	₱16, 600, 576. 35
On deposit with local banks:			
On open account.....		29, 626, 184. 62	29, 626, 184. 62
Time deposits.....		3, 839, 754. 29	3, 839, 754. 29
On deposit with authorized depositories in the United States.....	31, 378, 262. 77		62, 756, 525. 54
Total.....	32, 204, 997. 00	48, 413, 046. 80	112, 823, 040. 80

The cash balances of the following accounts make up the "general treasury" balance of ₱16,699,844.21 as indicated in the following statement:

General fund.....	₱15,963,832.20
Gold standard fund.....	375,628.29
Friar lands bonds sinking fund.....	(28,249.73)
Public works bonds sinking fund.....	100,838.14
Manila sewer and waterworks bonds sinking fund.....	6,545.94
Cebu waterworks bonds sinking fund.....	11,472.50
Manila R. R. purchase bonds sinking fund.....	970.66
Land title assurance fund.....	85,192.09
Property insurance fund.....	58,204.09
Fidelity bond premium fund.....	125,912.03

Total..... 16,699,844.21

The "depository" balance of ₱25,986,046.59, consists of the cash balances on hand December 31, 1917, in the following accounts:

Burnham memorial fund.....	₱4,000.00
Manila R. R. Co. (contract No. 4).....	20.00
Treasury overage account.....	36.40
Antituberculosis Society.....	564.48
Trust fund, sec. 2, Act No. 1510, Manila R. R. Co.....	41,982.60
Trust fund, sec. 1, Act No. 1592, condemnation proceedings.....	293.24
Trust fund, Act No. 2393, Silay Electric Light & Power Co.....	1,000.00
Cavite electric light franchise, sec. 2, Act No. 667.....	1,000.00
Philippine National Bank.....	18,489,688.99
Fourth of July celebration fund.....	31.90
Rizal Day celebration fund.....	1,028.44
Insular disbursing officers.....	9,567.93
United States disbursing officers (Navy).....	2,151,997.16
Treasurer of the United States.....	768,826.02
United States disbursing officers (Army).....	2,010,283.94
United States disbursing officers (Coast and Geodetic Survey).....	7,718.23
United States disbursing officers (American consul).....	7.26
Philippine National Bank (redemption fund).....	2,500,000.00

Total..... 25,986,046.59

The balance of ₱70,137,150 in the "silver certificate reserve fund" consists of ₱13,337,150 Philippine silver pesos held in the treasury vaults and \$28,400,000 United States currency deposited with authorized depositories in the United States. Of the \$28,400,000 with the authorized depositories in the United States, \$21,550,000 draws interest at the rate of 2½ per cent and \$6,850,000 at 3 per cent.

The substitution of gold deposited with the banks in the United States for silver pesos stored in the treasury vaults to secure the silver certificates was made since the middle of the year 1916. Such substitution, in addition to rendering the certificate reserve fund productive, enabled the Government to meet the great increase in circulation with paper currency without coining additional silver pesos.

The sum of ₱29,626,184.62, shown above under the caption "Distribution of funds" as an open account with local banks, represents the balance of current account with Philippine National Bank and draws interest at the rate of 1 per cent per annum on daily balances.

The following table shows the funds to which the time deposits of ₱3,839,754.29 pertain and the banks that hold them, together with the rate of interest drawn:

Name of fund.	Name of bank.	Interest per annum.	Amount of deposit.
General fund.....	Philippine National Bank.....	Per cent.	
Do.....	do.....	3½	₱2,701,421.74
Do.....	do.....	1	1,000,000.00
Do.....	do.....	3½	100,000.00
Fidelity deposits, sec. 2, Act No. 1510 ..	Hongkong and Shanghai Banking Corporation.	3½	38,332.55
Total.....			3,839,754.29

Cash balances belonging to the funds designated below and in the amounts stated were on deposit with authorized depositories in the United States on December 31, 1917:

Certificate reserve fund.....	\$28,400,000.00
Gold-standard fund.....	1,973,262.77
Depository fund, Philippine National Bank redemption fund....	1,000,000.00
<b>Total .....</b>	<b>31,373,262.77</b>

The following statement shows the authorized depositories of the Philippine Government in the United States and the balance on deposit with each at the close of the fiscal period covered by this report:

	U. S. Currency.
Chase National Bank, New York City.....	\$4,547,959.77
Philippine National Bank, New York City.....	19,980,303.00
Mercantile Trust Co., St. Louis, Mo.....	850,000.00
Central Trust Co., Chicago, Ill.....	550,000.00
Seattle National Bank, Seattle, Wash.....	200,000.00
National Bank of Commerce, Seattle, Wash.....	250,000.00
Commercial National Bank, Washington, D. C.....	250,000.00
Continental Trust Co., Washington, D. C.....	200,000.00
National Shawmut Bank of Boston, Boston, Mass.....	800,000.00
Merchants National Bank, Boston, Mass.....	200,000.00
Mechanics and Metals National Bank, New York City.....	800,000.00
National Bank of Commerce, New York City.....	500,000.00
Anglo & London-Paris National Bank, San Francisco, Cal.....	2,000,000.00
First National Bank of Omaha, Omaha, Nebr.....	250,000.00
<b>Total.....</b>	<b>31,378,262.77</b>

Of the above deposits, \$23,528,262.77 earns interest at the rate of 2½ per cent and the balance 3 per cent.

#### SPECIAL FUNDS.

**Gold standard fund.**—For the purpose of maintaining the parity of the Philippine silver peso with the Philippine gold peso, and in pursuance of the power conferred upon the government of the Philippine Islands by the act of Congress approved March 2, 1903, the "gold-standard fund," which is a reimbursable special fund, has been established.

The sources of income of this fund are enumerated in section 1623 of Act No. 2711 (Administrative Code). The receipts of the fund during the year derived from interest on investments and securities, premium on exchange, seigniorage, and other miscellaneous items amount in all to ₱1,806,957.47, as compared with ₱1,187,077.50 for the preceding year. The increase of ₱609,879.97 is due largely to the interest on funds deposited with the banks in the United States pertaining to the certificate reserve fund, which is this year greater on account of the heavy increase in circulation that has taken place during the year.

Exchange on New York amounting to ₱1,459,681.16 was sold during the year through the fund, as against ₱17,755,861.42 for the preceding year. In addition to the exchange sold, transfers amounting to ₱35,000,000 were also made for Government purposes. These were effected by credits furnished in Manila to the Treasurer of the United States in exchange for an equivalent amount placed to the credit of the Philippine Government in United States currency in New York.

One of the large sources of income of the gold-standard fund in previous years was the premium on exchange on New York, but this income has now been reduced to the minimum, owing to the activities of the Philippine National Bank, which is now conducting most of the exchange operations between New York and Manila.

The total amount of telegraphic transfers and demand drafts sold during the year by the insular treasurer's office on the provincial treasurers aggregated ₱902,422.38, as against ₱1,088,075.51 for the preceding year. The premiums realized amounted to ₱6,870.29. The total amount of telegraphic transfers and demand drafts sold by provincial treasurers on the insular treasury aggregated ₱3,650,460.57, as against ₱2,923,477.39 for the preceding year.

The limitation upon uses to which the gold-standard fund may be applied is contained in section 1626 of Act No. 2711. The total expenses from the fund amount to ₱258,847.35, as against ₱142,909.64 for the preceding year. The increase in the expenses is due to the heavy increase in circulation, which required the printing of a large quantity of silver certificates and the coinage of unusual amounts of subsidiary and minor coins.

Section 1624 of Act No. 2711 limits the amount of the gold-standard fund, except as regards the proceeds of certificates of indebtedness which shall in whatever amount be a part of the fund, to 35 per cent of the money of the government of the Philippine Islands in circulation and available therefor, exclusive of silver certificates in circulation protected by a gold reserve. The above section also provides that all accretions to the fund in excess of the per cent above mentioned shall be transferred to the unappropriated surplus of the insular government.

On December 31, 1917, the Philippine coinage in circulation and available therefor, exclusive of silver certificates in circulation protected by a gold reserve, amounted to ₱38,496,630.92, thus requiring, in accordance with the limitation prescribed by law, a current surplus balance in the fund of ₱13,473,820.82.

Under the provisions of law requiring the transfer to the unappropriated surplus of all accretions to the fund in excess of the 35 per cent above referred to, the sum of ₱1,465,527.32, which accumulated during the fiscal year 1917, was transferred to the general unappropriated surplus of the government, as against ₱2,703,630.96 transferred during the last year. The total transfers made since the passage of Act No. 2083 aggregate ₱10,738,306.11.

Section 1 of Act No. 2465 provides that of the gold standard fund, as fixed by law, not to exceed 80 per cent may, with the prior approval of the Governor General, be invested by the insular treasurer.

The condition of the fund as well as its status from the standpoint of investments at the end of the fiscal years 1916 and 1917 are shown in the following statement:

	1916	1917
<b>Balances, Dec. 31:</b>		
Loans to Provinces and municipalities.....	₱4,068,434.00	₱3,009,480.00
Loans to central Government.....	202,500.00	605,000.00
Loans to Manila R. R. Co.....	6,337,000.00	7,127,000.00
<b>Total investments.....</b>	<b>10,607,934.00</b>	<b>10,741,480.00</b>
Cash and accounts receivable.....	2,783,304.02	2,732,566.32
<b>Total.....</b>	<b>13,391,238.02</b>	<b>13,474,046.32</b>
Less account payable.....		225.50
<b>Balance.....</b>	<b>13,391,238.02</b>	<b>13,473,820.82</b>
<b>Investment status—</b>		
Investment margin (80 per cent of fund).....	10,712,990.42	10,779,066.65
Investments.....	10,607,934.00	10,741,480.00
<b>Balance available for investment.....</b>	<b>105,056.42</b>	<b>37,576.65</b>

It will be noted from the foregoing that the balance available for investment on December 31, 1917, was ₱37,576.65. When this amount is invested the cash balance of the fund will be approximately ₱330,000.

The net earnings from operation of the fund for the fiscal year 1917 amount to ₱1,548,110.12, as compared with ₱994,167.86 for the preceding year.

**Land-title assurance fund.**—The purpose of this fund is to reimburse anyone who may lose title to property registered under the land-registration act through adverse decisions of a court of competent jurisdiction. No claims for reimbursement have yet been made on the assurance fund since the passage of the act. The amount of the fund at the close of the fiscal year 1917 was ₱167,892.98.

**Property-insurance fund.**—This fund was created to provide for the replacing or repairing of Government property which shall have been damaged or destroyed by acts of God. The income of the fund during the year on account of premiums and interest on investment amounted to ₱27,316.30, while the

expenses on account of losses paid, etc., amounted to ₱20,697.19, or a net income of ₱3,619.11. The amount of the fund at the end of the year 1917 was ₱70,608.18.

**Fidelity-bond premium fund.**—This is a fund created for the purpose of replacing defalcations, shortages, and unrelieved losses in the accounts of bonded officers. The rate of premium for the insurance of the fidelity of officers and employees in this fund has been fixed at one-half of 1 per cent per annum. The total amount of bonds in effect on December 31, 1917, was ₱15,517,309. During the year, shortages in the accounts of insular, provincial, and municipal officials amounting to ₱38,778.33 were paid from the fund, and the total premium collected on fidelity bonds was ₱73,362.58. The amount of the fund at the close of the fiscal year 1917 was ₱166,378.83.

#### BONDED INDEBTEDNESS.

All the bonded indebtedness of the Government of the Philippine Islands consists of 10-30 years 4 per cent gold bonds distributed as follows:

Issue.	Date of maturity.	Amount.
Friar-lands bonds.....	Feb. 1, 1934	₱14,000,000
Public-works bonds:		
First issue.....	Mar. 1, 1935	5,000,000
Second issue.....	Feb. 1, 1936	2,000,000
Third issue.....	Aug. 1, 1939	3,000,000
Manila sewer and waterworks bonds:		
First issue.....	June 1, 1935	2,000,000
Second issue.....	Jan. 2, 1937	4,000,000
Third issue.....	Jan. 2, 1938	2,000,000
Cebu waterworks bonds.....	Jan. 1, 1941	250,000
Manila R. R. purchase bonds.....	Dec. 1, 1946	8,000,000
Total.....		40,250,000

The Jones law provides that the entire indebtedness of the Philippine Government should not exceed at any one time the sum of ₱30,000,000, exclusive of those obligations known as friar-lands bonds, or ₱44,000,000, including the friar-lands bonds.

Adequate legislation provides for sinking funds to redeem these bonds at maturity. The accretions of these sinking funds consist of the interest derived from investment and of the annual contributions from the insular funds. Under the provisions of different acts the sinking funds are adjusted annually so that the amount thereof on each anniversary of issue of the bonds equal an annuity of ₱19,371.33 for each ₱1,000,000 of bonds outstanding, together with interest at the rate of 3½ per cent per annum from the date of issue.

The amount of the bond sinking funds at the end of the year 1917 is as follows:

Friar land bond sinking fund.....	₱4,510,030.34
Public works bond sinking fund.....	2,514,739.45
Manila sewer and waterworks bond sinking fund.....	1,953,512.64
Cebu waterworks bond sinking fund.....	25,659.17
Railroad purchase bond sinking fund.....	155,740.66
Total.....	9,164,682.26

#### GUARANTY OF INTEREST ON BOND ISSUES OF RAILWAY CORPORATIONS.

Under authority of an act of Congress approved February 6, 1905, the insular government guarantees 4 per cent interest for a period not to exceed 30 years on the first-lien bonds issued by the Philippine Railway Co. for the construction of certain lines in the islands of Panay and Cebu and by the Manila Railroad Co. for the construction of the southern lines in the island of Luzon.

On December 31, 1917, the combined issues of both companies outstanding totaled \$22,263,000 United States currency, and the net balance of the sums advanced by the Government under the above guaranty was ₱5,583,240.39.

## INVESTMENTS.

The following statement shows the investments made from the funds under the control of the insular treasurer:

Title of accounts and funds:	Total.
General fund.....	₱4,048,760.00
Gold standard fund, Art. VII, Act No. 2711.....	10,741,480.00
Manila sewer and waterworks bonds sinking fund, Act No. 1323.....	1,937,177.50
Public works bonds sinking fund, Act No. 2425.....	2,393,230.00
Friar lands bonds sinking fund, Acts Nos. 1749, 2550, and 2592.....	4,547,255.00
Cebu waterworks bonds sinking fund, Act No. 2009.....	14,000.00
Manila R. R. purchase bonds sinking fund, Act No. 2625.....	154,000.00
Land title assurance fund, Act No. 496.....	80,869.00
Property insurance fund, secs. 336 to 341, Act No. 2711.....	12,500.00
Fidelity bond premium fund, secs. 313 to 335, Act No. 2711.....	45,000.00
Purchase of Manila R. R. Co. stock, Act. No. 2574.....	8,000,000.00

The balance of friar lands bond sinking fund, being ₱4,510,030.34 only, including ₱53,025.07 in accounts receivable, has been overinvested in the amount of ₱37,224.66.

## BANKS AND BANKING.

*Private banks.*—The supervision over banking institutions has been vested by law in the insular treasurer, who is required to examine, personally, or by deputies, at least once in every 12 months and at such other times as he may deem desirable, the books of every such institution.

During the year the following institutions have been examined and reported on by deputies of the insular treasurer: The Philippine National Bank, with branches at Iloilo, Cebu, and Corregidor; the Hongkong & Shanghai Banking Corporation, Manila and Iloilo branches; Chartered Bank of India, Australia, and China, Manila branch, and subagencies at Iloilo and Cebu; International Banking Corporation, Manila branch and subagency at Cebu; Bank of the Philippine Islands, Manila, and its Iloilo and Zamboanga branches; Manila Building and Loan Association; Monte de Piedad & Savings Bank; Insular Life Insurance Co.; the Philippine Trust Co.; Fidelity & Surety Co. of the Philippine Islands; El Hogar Filipino; and Zamboanga Building and Loan Association.

The following is a comparative consolidated statement of the resources and liabilities of all commercial banks in the Philippine Islands at the close of business on December 31 for the years 1916 and 1917:

	December 31—		Increase.
	1916	1917	
<b>RESOURCES.</b>			
Loans and discounts.....	₱21,585,237.07	₱32,871,372.23	₱31,286,135.16
Overdrafts.....	27,213,950.87	30,535,890.84	3,321,939.97
Due from other banks, head office, branches, and agents.....	42,738,283.03	86,349,011.52	43,610,728.49
Cash on hand and other cash items.....	10,687,448.39	12,598,119.89	1,910,673.50
Other resources.....	19,729,236.94	56,893,331.96	37,164,095.02
Total.....	121,964,154.30	239,247,726.44	117,293,572.14
<b>LIABILITIES</b>			
Capital stock.....	10,396,420.00	16,168,765.80	5,772,345.80
Reserve fund.....	1,930,321.28	4,121,763.66	2,191,442.38
Bank notes in circulation.....	5,841,327.50	10,137,357.50	4,296,030.00
Deposits.....	79,766,016.56	140,093,968.63	60,327,941.97
Due to other banks, head office, branches, and correspondents.....	14,617,215.31	43,945,230.42	29,328,015.11
Other liabilities.....	9,402,853.65	24,780,650.53	15,377,796.88
Total.....	121,964,154.30	239,247,726.44	117,293,572.14

# 112 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

*The Government agricultural bank.*—Pursuant to the provisions of section 6 of Act No. 2612, all the current assets and liabilities of the agricultural bank were transferred as of May 2, 1916, to the Philippine National Bank. Part of the assets, however, of said agricultural bank, represented by certain mortgage loans and accrued interest receivable, was accepted by the Philippine National Bank only as collection item. The total amount of such loans outstanding on December 31, 1917, was ₱656,888.88 and the interest accrued up to said date amounted to ₱181,895.11.

## CIRCULATION.

As a result of the large trade balance in favor of the Philippine Islands there is a great general prosperity which is reflected in the unprecedented increase in circulation. The money in circulation on December 31, 1916, amounted to ₱67,059,189.04, while the circulation on December 31, 1917, was ₱102,580,313.57 or an increase during the year, 1917, of ₱35,521,124.53.

The circulation of the islands on December 31, 1917, consisted of the following:

Philippine silver certificates, against which silver pesos are held in reserve.....	₱13,337,150.00
Philippine silver certificates secured by gold coin deposited in authorized depositories in the United States.....	56,800,000.00
	₱70,137,150.00
Less amount held in Treasury.....	625,451.00
Total .....	69,511,699.00
Silver and minor coinage.....	22,931,257.07
Notes:	
Bank of the Philippine Islands.....	5,577,357.50
Philippine National Bank.....	4,560,000.00
Total circulation .....	102,580,313.57

Based on the population of the Philippine Islands of 7,635,426, per census of 1903, the per capita circulation on December 31, 1917, would be ₱13.44.

## INSURANCE COMMISSIONER.

Owing to unavoidable delays and interruptions in connection with the mail service, as the consequence of the prevailing war conditions, the insular treasurer, who is the insurance commissioner ex-officio, is unable to submit a complete statistical statement showing the condition of affairs conducted along this line during the year, as many of the annual statements required for foreign insurance companies have not been received.

On December 31, 1917, there were 36 fire, 23 marine, 9 life, and 14 miscellaneous insurance companies doing business in the Philippine Islands.

In the exercise of the power conferred on the insurance commissioner by the insurance law, 165 agent's licenses were issued during the year covered by this report.

## BUREAU OF CUSTOMS.

### GENERAL TRADE CONDITIONS.

The following statement shows the value of imports and exports, total trade, and trade balance for the years 1916 and 1917:

Year.	Imports.	Exports.	Total trade.	Balance of trade in favor of islands.
1916.....	₱90,992,675	₱139,874,365	₱230,867,040	₱48,881,690
1917.....	131,594,061	191,208,613	322,802,674	59,614,562

As it will be noted from the foregoing, the total value of foreign trade for the year 1917, computed from the declared values of imports and exports, amounts to ₱322,802,674, a value larger than in any calendar year in the history

of the islands, and is approximately 40 per cent greater than the preceding year. This increase is due in a large measure to higher prices generally of some commodities, but is also due to increased home production of commodities for export and greater local demand for the manufactures and products of foreign countries.

It will also be noted from the above statement that the balance of trade for the year 1917 was ₱59,614,552 in favor of the islands as against ₱48,881,690 for the preceding year.

The changing commercial relations of the Philippine Islands with foreign countries, which was noted last year, is still marked, due to effects of the war. No trade is recorded with the central countries of Europe, except as to such merchandise as was en route before the commencement of the war. Trade with the United Kingdom, which last year showed substantial increase over previous years, this year shows a decline of 11 per cent. Trade with Japan, which showed an increase of 27 per cent for 1916 over 1915, shows a greater increase this year over the preceding year, amounting to 62 per cent. Trade with the French East Indies declined 12 per cent. Trade with France shows a continued decline, being less than one-half that of the year 1915. Trade with China shows a substantial increase, and the same is true of the trade with Hongkong. Trade with Spain shows a decline of 30 per cent. Trade with Australasia almost doubled, while trade with the British East Indies shows a slight decline. Trade with Italy amounts to only one-third that of the preceding year. Trade with Switzerland shows a slight decline, with the Dutch East Indies a slight increase, and with the Netherlands was practically nil. Trade with Siam shows an increase of about 10 per cent, while that with Norway is decreased. Imports from Kwantung territory (Japanese-China) show a slight increase, but exports decreased. Canada received 20 per cent less of our exports than in 1916, but the imports, though small, more than doubled.

#### TRADE WITH THE UNITED STATES.

The more important trade relations are shown with the United States, which received approximately two-thirds of all exports and furnished almost three-fifths of all imports, amounting to an increase of 72 per cent over the year 1916 and more than double that of 1915.

#### CARRYING TRADE.

The number of vessels engaged in the foreign trade calling at Philippine ports show a considerable decrease in comparison with previous years. British vessels, as usual, received the greatest share, which was, however, 15 per cent less than last year. Their share amounts approximately to only one-third of the total this year, as compared with 56 per cent in 1916, the reduction appearing in the export trade, their share of the import trade having slightly increased. Japanese vessels received almost double the value of trade carried by them in 1916, or approximately 25 per cent on the total trade. American vessels rank third, with a share amounting to about 22 per cent of the total, of which their share of the export trade exceeds that of the Japanese vessels and almost equals that of the British. Norwegian vessels rank fourth with Philippine vessels fifth in respect to the value of trade transported.

#### IMPORTS.

The total value of imports for the year 1917 amounts to sum of ₱131,594,061, which shows an increase of almost 50 per cent over that of the preceding year, which was ₱90,992,875. The total value of imports for the year under consideration is the greatest on record. The increase is largely due, however, to higher prices generally of all commodities rather than to the greater quantities imported. The principal commodities concerned in the increase are cotton goods, cement, dairy products, fibers and grass goods, iron and steel, leather and manufactures, paper and manufactures, meat products, silks, wood manufactures, and woolen goods. Importations of rice show a considerable decline, both as to quantity imported and total value, while other foodstuffs show a general increase. Other commodities showing a decrease in the total value of importations as compared with last year are carabao and other cattle, breadstuffs other than flour, eggs, india rubber goods, musical instruments, spirits, wines and liquors, and sugar and molasses. All other usual imported commodities show a general substantial increase.



## COTTON AND ITS MANUFACTURES.

The value of cotton and its manufactures imported during 1917 was more than double that of 1916. Of the total cotton importations the United States furnished 70 per cent, or an amount double that furnished in 1916. Cotton imports from the United Kingdom also show an increase of 40 per cent over last year, and about the same proportion from Japan, which country furnished an amount equal to 40 per cent more than the United Kingdom. The great increase in the value of cotton importations appears to be made up from a general increase in prices as well as quantities of goods imported. The total value of cotton imports for the year amounts to ₱37,574,005, which is 29 per cent of the total value of all imports.

## IRON AND STEEL.

The value of imports of iron and steel for the year 1917 increased to the sum of ₱11,855,125, from ₱7,526,477 for the year 1916. This increase, however, is made up largely from the general higher prices rather than the quantities imported. About 85 per cent of the total importations of this commodity were furnished by the United States, as compared with 81 per cent last year. The value of imports of this class from Japan also shows an increase of 32 per cent over the preceding year, and constitutes almost 6 per cent of the total value of all iron and steel imports. The value of these imports from the United Kingdom shows a decline amounting to 27 per cent from the value of 1916. Iron and steel imports amounted to 9 per cent of the total value of all imports for the year 1917.

## RICE.

Rice importations continued to decline during the year 1917, both in total value and quantity, as compared with the years 1915 and 1916, although the average value per 100 kilos amounted to ₱7.33, which shows an increase of 46 centavos over 1916 and ₱1.17 over 1915. The value of rice imported during the year 1917 is ₱10,781,463, or about 8 per cent of the total value of all imports.

## OTHER IMPORTS.

*Automobiles.*—Imports of automobiles and parts thereof, including tires, amounted to ₱3,080,801 during the year 1917, as compared with ₱2,705,145 for the preceding year.

*Cattle and carabao.*—The total value of imported cattle and carabao amounted to ₱432,957, as against ₱474,271 last year.

*Chemicals, drugs, dyes, and medicines.*—The total value of these commodities imported during the year amounted to ₱2,862,248, as compared with ₱2,776,148 last year.

*Coal.*—The total import value of coal for the year amounts to ₱3,076,470, as against ₱2,607,988 for last year.

*Food products.*—Other than cattle and rice, the total value of food products imported during the year 1917, consisting of flour and other breadstuffs, cacao, coffee, eggs, fish, fruits and nuts, meat and dairy products, sugar and vegetables, amounted to ₱17,608,865, not including various minor articles for the table.

*Leather goods.*—The value of leather importation for the year increased to ₱3,247,817, from ₱2,119,337 last year.

*Oils.*—Illuminating oil to the value of ₱2,673,335 was imported during the year, as compared with ₱2,025,691 for the preceding year. Other oils show a constantly increasing value of importations, and the value this year amounted to ₱2,914,882.

*Silks.*—The value of silk imports more than doubled that of last year, the same amounting to ₱3,961,187.

*Vegetables, fibers, and manufactures.*—Commodities of this class show importations to the total value of ₱3,071,808, which amount is more than double that of any previous years.

*Wood manufactures.*—Importations of this class amounted to ₱1,098,429 in value this year, which amount represents an increase of more than 60 per cent over last year.

*Woolen manufactures.*—Importations of these commodities almost trebled in value over last year, amounting to ₱855,827.

Importations of minor commodities not otherwise specified amounted to ₱8,918,219 in value this year, as compared with ₱6,889,819 last year.

## EXPORTS.

The large increase in the total value of exports for the year is due to higher prices generally of all commodities and increased quantities. Hemp again leads the list of exports, with copra and coconut products second, and sugar third on the list. Foreign merchandise amounting to ₱3,324,851 in value was exported during the year, as against ₱3,208,678 in 1916. The total value of all exports of domestic products amounts to ₱187,883,762, as compared with ₱136,065,687 for the year 1916.

*Copra and coconut products.*—The quantity of copra exports increased approximately 17 per cent over last year, although prices were generally lower, the average value per 1,000 kilos being only ₱180.67, as compared with ₱196.90 for 1916. The total value of copra exported amounts to ₱16,654,301. One-half of the copra exported went to the United States. Large quantities of copra are now being consumed by the oil mills operating in the Philippine Islands, and therefore, the quantity of copra exported does not represent the quantity produced. Coconut oil was exported to the value of ₱22,818,294, as against ₱7,851,469 last year, which is indicative of progress in that industry locally. Copra cake to the value of ₱36,999 was exported, as compared with ₱45,921 last year. The total value of copra and coconut products exported this year amounts to ₱39,509,594, as compared with ₱22,129,331 last year.

*Hemp.*—The total value of hemp of all grades exported during the year amounted to ₱93,615,559, which is nearly as much as the total value of the hemp exported during the years 1916 and 1915 together. The average value per 1,000 kilos is considerably higher than in any previous years, amounting to ₱552.51 as compared with ₱388.70 for 1916 and ₱300.53 for 1915. The total quantity exported amounted to ₱93,615,559, as compared with ₱44,151,342 for 1916. The United States consumed more than one-half of the total quantity exported, the value of which amounts to considerably more than one-half of the total value, the average value per 1,000 kilos of hemp exported to the United States being ₱620.32. Knotted hemp to the value of ₱1,880,159 was exported as compared with ₱1,665,317 last year. Hemp holds first place among the year's exports, its percentage being 48.9 of the total value of export as compared with 38.1 last year.

*Sugar.*—Sugar exports showed the highest return in 1916 both in value and quantity, and a decided decline in 1917. The total value of sugar exported during the year 1917, amounted to ₱24,555,357, which is less than two-thirds of the total value of all exports as compared with 26.5 per cent of that of the preceding year, and only amounts to 12.8 per cent last year. Lack of transportation is generally mentioned as the cause of the decline, although reports from the sugar districts show that crops were not large, but the warehouses are filled with stocks that can not be moved. The United States took about one-third of the entire output, paying therefor considerably more than the average price, the average price paid being ₱173.32 per 1,000 kilos.

*Tobacco products.*—The total value of exports of tobacco products reached the sum of ₱14,301,081, as compared with ₱11,652,349 in 1916. The greatest increase is shown in cigars, the value exported being the highest recorded. The value of cigarettes exported likewise is the highest on record. The value of other tobacco exports show a decline, as compared with last year, but exceeds the value shown in any other year. The total quantity of cigars exported amounted to 284,525 thousands, valued at ₱9,588,192, or an average of 33.69 per 1,000. The United States consumed almost three-fourths of this output, paying therefor ₱7,725,966.

*Maguey.*—Exports of maguey continue to increase in value, amounting to ₱4,696,493 this year, the highest value on record and more than four times the value of the 1915 exports of this commodity.

*Embroideries and hats.*—The total value of exported embroideries was ₱3,929,318, almost all of which went to the United States. This is an increase of over 68 per cent as compared with the exports values of the same last year. Hats to the value of ₱1,390,833 were exported as against ₱1,313,226 last year.

*Lumber.*—Exports in lumber amounted to ₱823,560, which is slightly less than the value of last year's shipments. Tanguile ranks first as to quantity and value of lumber exports, although a decrease is shown this year, the value being ₱341,683 as against ₱529,119 last year.

*Pearl buttons and shells.*—The value of exports of these commodities during 1917 amounted to ₱513,427, showing a considerable decrease in comparison with the years 1916 and 1915.

## 116 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

**Gold ore and bullion.**—The total value of exports of gold ore, base bullion, and bullion declined from ₱2,987,118 in 1916 to ₱2,701,304 this year. Gold bullion amounting to 88,658 ounces and ₱2,677,284 in value represents the total exported, all of which were shipped to the United States. The average value per ounce being ₱30.20 as compared with ₱28.92 last year.

### CUSTOMS COLLECTIONS.

The following statement shows the total collections of the bureau of customs, exclusive of the division of vessels, lighthouses, and marine railway and repair shops, by sources, for the year 1917 as compared with the year 1916:

Sources	1917	1916	Increase (+) or decrease (—).
Import duty.....	₱11,333,968.54	₱10,066,768.68	+ ₱1,267,191.86
Export duty <sup>1</sup> .....	2,121.02	12,363.70	— 10,272.68
Wharfage.....	1,144,397.32	1,267,205.56	— 122,808.24
Licenses, coastwise.....	—	55,441.79	— 55,441.79
Fines and seizures.....	28,018.28	31,744.57	— 3,726.24
Tonnage dues.....	152,708.27	81,940.11	+ 70,768.16
Storage.....	46,460.28	32,039.50	+ 14,420.78
Immigration dues.....	157,064.00	90,312.00	+ 66,752.00
Auction sales.....	3,531.51	3,737.59	— 206.08
Arrastre and piers collections.....	244,762.42	211,901.01	+ 32,861.41
Various other sources.....	319,498.97	296,179.50	+ 23,319.47
Trust fund.....	138,467.78	80,633.35	+ 57,834.43
<b>Total.....</b>	<b>13,571,007.34</b>	<b>12,220,315.36</b>	<b>+ 1,350,691.98</b>

<sup>1</sup> Collected on hemp reexported from the United States.

Besides the total collections shown in the foregoing table internal-revenue taxes were collected by the bureau of customs under the provisions of Act No. 2432 as amended by Act No. 2445 to the amount of ₱2,283,738.35 as compared with ₱1,983,698.56 collected during 1916.

### IMMIGRATION AND EMIGRATION.

Notwithstanding the restrictions put upon travel on account of war regulations and the shortage of tonnage the passenger movement for the year shows a considerable increase. The total movement of inward-bound passengers for the Philippine Islands during the year aggregated 19,635, and 16,293 outward-bound passengers departed from Philippine ports, as against 18,076 inward and 17,569 outward bound passengers last year. Out of the total movement of inward bound passengers 16,832 were males and 2,803 were females. The net gain to the Philippine Islands from the inward-passenger movement over the outward amounts to 3,342. Of the total number of inward passengers 6,939 were immigrant aliens, of whom 6,387 were males and 552 females. Philippine citizens to the number of 2,263 arrived and 1,095 departed, and 1,226 American citizens arrived and 819 departed. The Chinese again head the list of aliens this year both in respect to arrivals and departures, the number being 8,397 admitted and 6,389 departed as compared with 8,738 admitted and 7,898 departed last year. The number of Japanese passengers was 3,789 arrived and 817 departed during the year as compared with 1,374 arrived and 771 departed during last year. Practically all other nationalities show a decrease in the numbers arriving and departing as compared with last year.

### SHIPPING.

**Foreign.**—The total number of entrances and clearances of vessels engaged in the foreign trade for the year 1917 was 1,300, as compared with 1,423 for last year. The aggregate tonnage of such vessels amounted to 2,920,692 this year, as compared with 3,153,470 last year. British vessels, which last year represented more than one-half of all foreign shipping trading in the Philippine ports, this year represent only one-third. Japanese vessels take second place, representing about one-fourth. Philippine vessels take third place, representing about one-sixth, and American vessels take fourth place, representing one-eighth of the total.

**Coastwise.**—The total number of entrances and clearances at ports of entry of vessels engaged in coastwise trade for the year 1917 was 23,966 this year, as compared with 25,201 for the preceding year. The aggregate tonnage amounts

to 2,665,951 net tons this year, as compared with 2,651,126 last year. These figures indicate greater activity among the smaller vessels, which are taking the places of the larger vessels withdrawn from the coastwise trade to enter the foreign trade.

#### INSPECTION OF VESSELS.

During the year inspections were made by the hull and boiler inspectors of 248 vessels. Of the total number inspected, 9 were steamers of more than 1,500 tons; 26 steamers and 1 sailing vessel of less than 1,500 but more than 500 tons; 14 steamers and 7 sailing vessels of less than 500 but more than 300 tons; 43 steamers and 17 sailing vessels of less than 300 but more than 100 tons; 127 steamers and 4 sailing vessels of less than 100 tons. Nine steam vessels were awaiting inspection at the close of the year and 11 steam vessels and 53 sailing vessels were exempt from inspection by reason of having been placed out of commission. Reports were received of 78 vessels wrecked and lost during the year and 11 steamers and 53 sailing vessels have been placed out of commission. Admeasurements were made of 85 vessels.

#### MARINE OFFICERS.

The board of marine examiners examined 492 applicants for certificates as marine officers in various grades. Of this number, 22 failed to pass. The records show that there are 1,035 Philippine marine officers now holding unexpired certificates as such and 679 expired certificates are outstanding which have not been renewed.

#### DOCUMENTATION AND LICENSES.

The total of 447 vessels were newly documented in the coastwise trade during the year and 645 in the lighterage and harbor trade, as compared with the total of 388 vessels documented last year. The increase is due to the fact that under the provisions of the Administrative Code all vessels over 3 tons gross are required to be registered. The increased tonnage of such newly registered vessels amounts to 20,724. Licenses were issued during the year to 195 steam vessels, having a gross tonnage of 26,198, and 712 sailing vessels, having tonnage of 30,795, in the coastwise trade. Lighterage and harbor licenses were issued to 2,630 vessels, having a tonnage of 37,120. The total number of vessels in commission during the year amounted, therefore, to 3,964, with the total net tonnage of 102,994.

#### SECRET SERVICE.

The work of the customs secret service shows a record of 318 cases handled in the matter of apprehending violators of the customs, immigration, and opium laws, of which number convictions were obtained in 255 cases, 41 cases were dismissed, and 22 cases were pending final action. The fines imposed in such cases amounted to ₱23,911.10.

#### CONSULAR DUTIES.

The number of consular invoices issued during the year was 86, and 148 invoices of returned American goods were issued. The number of seamen shipped and discharged during the year was 1,929 shipped and 1,097 discharged, as compared with 745 shipped and 405 discharged last year.

#### ARRASTREE DIVISION.

The records of this division show that a total of 281,653 tons of cargo were handled during the year at the port of Manila, as against 215,218 last year, or an increase of approximately 30 per cent. These figures do not include the cargo landed from the German ships, which was about 12,000 tons. A general increase of wages was allowed to laborers during the year, amounting to from 20 to 30 centavos per day per man, and an average of 420 men per day being employed.

#### DIVISION OF VESSELS.

During the year there were operated by this division the cable ship *J. Bustamante*, six cutters, one seagoing launch, and three harbor and river launches, exclusive of those used for customs purposes. The cable ship *J. Bustamante* maintained the submarine cables throughout the islands and in addition thereto made several voyages to Saigon under charter to commercial firms for the

# 118 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

transportation of cargoes of rice. The cutters have been engaged mainly in the transportation of official passengers and freight and on lighthouse work. Due to the withdrawal of the commercial vessels operating on the Manila, Mindoro, and Palawan route, the cutter *Negros* was assigned to cover this route during the last five months of this year.

## LIGHTHOUSE DIVISION.

During the year 1917 there was a net increase of 17 in the total number of aids to navigation maintained by the lighthouse service. There were installed eight acetylene-gas flashing lights, two fixed red-lens lanterns, three second-class buoys, three third-class buoys, and one set of range marks. New lights were established at Pearl Bank, Saluag Island, Calantas Rock, Bogo Harbor, Pescador Island, Amblan Point, Kolambugan Bay, Silanga Pass, and Port Balanacan. New buoys were established at Guardla Shoal, Dularan Bay, and Sharks Pin Bay. A new beacon was established at Kolambugan Bay. There were 181 lights, 119 buoys, and 80 beacons in operation as aids to navigation at the close of the year 1917.

## MARINE RAILWAY AND REPAIR SHOPS.

The operation of the marine railway and repair shops has been confined to work required by the Federal, insular, provincial, and municipal governments, and has been performed under the provisions of Act No. 1416.

## BUREAU OF INTERNAL REVENUE.

### COLLECTIONS.

The following is a summary of the collections made by the bureau of internal revenue during the calendar years 1916 and 1917:

Item.	1916	1917
Alcohol and tobacco products removed or imported for consumption in the Philippine Islands:		
Manufactured in the Philippine Islands.....	P8,705,764.80	P10,712,135.90
Imported.....	664,533.75	822,660.55
Denatured alcohol, domestic.....	78.30	...
Kerosene or petroleum, imported.....	663,094.17	712,300.53
Naphtha, gasoline, etc., imported.....	259,703.83	309,376.56
Lubricating oils, imported.....	80,747.45	71,324.97
Coal and coke:		
Imported.....	175,737.30	157,186.55
Domestic.....	...	1,608.01
Licenses:		
Dealers in alcohol and tobacco products.....	768,581.10	922,786.86
Merchant, manufacturers, common carriers, etc.....	6,819,776.27	9,633,399.35
Occupations, trades, and professions.....	869,215.13	1,041,688.37
Weights and measures.....	132,514.57	159,631.69
Banks and bankers.....	332,920.51	523,728.23
Insurance companies.....	46,296.57	53,268.58
Mines.....	28,036.80	28,665.70
Documentary stamp taxes.....	282,113.78	382,951.40
Cedulas.....	4,480,667.80	5,351,066.00
Forest products.....	494,447.65	636,328.17
Cinematographic films:		
Domestic.....	205.95	...
Imported.....	77,212.05	40,350.96
Playing cards.....	106,831.54	100,025.05
Miscellaneous stamp collections.....	86.78	297.51
United States internal-revenue taxes collected on Philippine tobacco products shipped to the United States.....	714,947.40	1,253,851.23
Income taxes.....	529,607.97	1,182,888.33
Registered dealers in prohibited drugs.....	2,699.87	2,509.95
Pearl fisheries.....	5,090.00	6,556.25
Inheritance taxes.....	5,872.07	5,824.98
Sponge fisheries.....	5.00	602.61
Opium.....	1,743.30	2,730.18
Franchise taxes.....	220,451.16	247,748.90
Justice of the peace fines and fees.....	337,658.73	453,037.07
City of Manila taxes and revenues.....	3,851,992.61	5,045,891.95
Sisiman Matadero.....	5,265.11	...
Mining fees.....	...	1,547.44
Tobacco inspection fees.....	57,464.96	170,321.76
Grand total.....	30,781,638.98	39,937,370.96

The foregoing table shows that the total amount collected during the year 1917 was ₱39,937,370.96, as compared with a total collection during the calendar year 1916 of ₱30,731,638.98, an increase of ₱9,205,731.98, or about 30 per cent.

#### APPORTIONMENT OF INTERNAL-REVENUE TAXES.

Under the apportionment provisions of section 491 of the revised Administrative Code, internal revenue, exclusive of franchise and inheritance taxes and revenue from opium, collected during the fiscal years 1916 and 1917 accrued to the various treasuries as follows:

Item	1916	1917
To the insular treasury.....	₱16,360,922.74	₱21,846,666.99
To the provincial treasuries:		
One-half of regular cedula taxes.....	1,135,714.50	1,371,985.25
All road and bridge cedula taxes.....	2,209,228.50	2,608,155.50
Share of other collections.....	1,582,041.78	1,582,041.78
Weights and measures.....	66,257.29	79,815.85
Total.....	4,993,242.07	5,639,998.38
To the municipal treasuries:		
One-half of regular cedula taxes.....	1,135,714.50	1,371,985.25
Portion of road and bridge cedula taxes devoted exclusively for school purposes in the barrio of San Jose, Corregidor.....		939.00
Certain license taxes.....	860,732.44	1,039,413.13
Share of other collections.....	1,582,041.77	1,582,041.77
Weights and measures.....	66,257.28	79,815.84
Total.....	3,644,745.99	4,074,194.99
Grand total.....	24,988,910.80	31,560,860.36

The following statement shows the insular government's share of all collections reported to this bureau during the fiscal years 1916 and 1917:

Item.	1916	1917
Philippine internal revenue.....	₱16,360,922.74	₱21,846,666.99
United States internal revenue.....	714,947.40	1,253,851.23
Income taxes.....	629,607.97	1,182,888.33
Inheritance taxes.....	5,872.07	5,824.96
Sponge fishing.....	1.00	120.52
Registered dealers in prohibited drugs.....	2,680.87	2,509.95
Franchise taxes.....	138,686.15	149,517.16
Opium.....	1,743.30	2,730.18
Justice of peace fines and fees.....	328,361.06	422,585.28
Sisiman matadero.....	5,265.11	
Mining fees.....		1,547.44
Tobacco inspection fees.....	57,464.96	170,321.76
Total.....	18,143,561.63	25,038,563.77

#### COST OF COLLECTION.

The net cost to the Government of making the above collections, including the operation of the bureau of internal revenue, during the year 1917 was ₱603,440.31, as compared with ₱575,879.02, or an increase of ₱27,561.29. The total collections for 1917, including the city of Manila municipal revenue being ₱39,937,370.96, this makes the cost of collection 1.51 centavos for each peso collected, as compared with 1.87 centavos during 1916, 2.07 centavos during 1915, and 2.45 centavos during 1914.

#### ALCOHOL PRODUCTS.

*Distilled spirits.*—The total output from registered distilleries during the calendar year 1917 was 15,073,758 proof liters, compared with 10,350,363 proof liters in 1916, an increase of 4,723,395 proof liters. The quantity of denatured alcohol used for industrial purposes was 966,549 proof liters, as compared with 735,753 proof liters so consumed during 1916.

## 120 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

On December 31, 1917, there were in operation throughout the islands 80 registered stills of modern type, as compared with 80 in operation December 31, 1916, 75 in operation December 31, 1915, 79 in operation December 31, 1914, 75 in operation December 31, 1913, 75 in operation June 30, 1913, 70 on June 30, 1912, 67 on June 30, 1911, 68 on June 30, 1910, and 78 on the same date of 1909.

One hundred and fifty-eight illicit stills were captured by internal-revenue agents during the year 1917, of which 4 were captured in Agusan, 3 in Albay, 10 in Cagayan, 121 in Pangasinan, 2 in Samar, 6 in Surigao, and 12 in Tayabas. During the year 1916 there were captured 85 illicit stills.

**Wines.**—There were removed for domestic consumption during the fiscal year 1917, 1,599,924 gauge liters of still wines and imitation wines, as compared with 820,411 gauge liters removed during 1916.

Taxes to the amount of ₱85,142.59 were collected on imported wines and imitation wines in 1917, as against ₱91,261.29 collected in 1916.

**Fermented liquors.**—The following comparative statement shows the quantity (in gauge liters) of domestic and imported beer on which taxes were collected, also the quantity exported free from taxes during the fiscal years 1916 and 1917:

	1916	1917
Domestic.....	5,720,769.80	5,575,200.00
Imported.....	215,817.60	161,372.00
Total.....	5,936,587.40	6,036,572.00
Exported.....	40,889.00	93,274.40

### TOBACCO PRODUCTS AND MATCHES.

**Smoking and chewing tobacco.**—The following comparative statement shows the quantities of domestic smoking and chewing tobacco on which taxes were collected during the fiscal years 1916 and 1917:

Kind.	1916	1917
	Kilos.	Kilos.
Smoking tobacco.....	243,757	296,130
Chewing tobacco.....	159,890	192,767
Total.....	403,617	488,897

Taxes were collected also on 389,869 kilos of imported smoking and chewing tobacco in 1917, and on 349,655 kilos in 1916. During the fiscal year 1917, 624,941 kilos of stripped and partially manufactured tobacco were exported, as compared with 680,854 kilos during 1916.

In addition to the domestic smoking and chewing tobacco consumed in these islands on which the tax was paid, the exports of smoking tobacco during the calendar year 1917 to other countries amounted to 42,817 kilos, as compared with 55,458 kilos in 1916.

**Cigars.**—The total production of cigars during the year 1917 was 412,138,207, as against 271,868,278 in 1916, an increase of 140,269,929. Of the first number 104,460,749 were consumed in the Philippine Islands, 91,553,148 were exported to foreign countries, and 216,124,310 were shipped to the United States, as compared with 80,518,378, 77,418,334, and 113,931,566, respectively, in 1916.

For every thousand cigars shipped to the United States the Philippine government derives a revenue of ₱6, plus the new graduated war-revenue tax collected since November last, and from this source during the past year a total of ₱1,253,851.23 was collected, as compared with ₱714,947.40 for 1916.

The exportation of Manila cigars to the United States had decreased steadily for a number of years until the end of 1914, when it reached the total of only 59,338,293. As a result of investigations and the recommendations made by the collector of internal revenue, the legislature, in February, 1916, passed Act No. 2613, providing for improvements in growing and curing tobacco, assessing

inspection fees to pay the expenses of the enforcement of the act, and conducting a propaganda of advertising and publicity for the purpose of increasing the tobacco trade between the Philippines and the United States. The law provides also, with certain limitations, for the protection of exporters against loss on account of tobacco products that become damaged en route from Manila to the market in the United States. It is intended that this protection, together with advertising and publicity, will make the Manila cigar business attractive to American dealers and will also protect the good name of Manila cigars by keeping damaged cigars from the consumer.

As a result of the activities under the provisions of Act No. 2613, a total of 216,124,310 Manila cigars were exported to the United States during 1917, which is an increase of 89.7 per cent over 1916, and is considerably the largest volume of business for any one year. Prior to 1916 the amount of Philippine leaf tobacco exported to the United States was negligible. During the year 1916 the export of leaf tobacco to the United States increased to almost twelve times the amount exported during 1915 and more than twenty times the amount exported during 1914. In 1917 the increase continued, 3,283,607 kilos having been sent to America during the year just closed. The price of leaf tobacco in the local market has advanced rapidly, and the present indications are that tobacco growing will soon be developed into one of the most profitable agricultural pursuits.

The actual exportation of Philippine leaf tobacco to the United States for the last two years was as follows:

Kind of tobacco.	1916	1917
Leaf tobacco.....	Kilos. 208,905	Kilos. 561,779
Stripped leaf, and other partially manufactured tobacco.....	424,866	2,721,826
<b>Total.....</b>	<b>633,771</b>	<b>3,283,607</b>

*Cigarettes.*—The total production during the year was 4,540,519,812 cigarettes, as compared with 4,180,673,512 during the preceding year. Of the first number 4,482,685,125 were consumed in the islands, 52,278,522 were exported to foreign countries, and 5,556,165 were shipped to the United States, as compared with 4,135,448,970, 39,026,942, and 6,197,600, respectively, for the calendar year 1916. About one-half of the cigarettes exported went to China, 28,189,058 having been shipped to that country during 1917, compared with 24,188,040 cigarettes in 1916.

*Matches.*—The quantity of matches consumed in the islands during the year was 955,487.03 gross boxes, of which 363,350 gross boxes were of domestic manufacture and 592,137.03 gross boxes were imported, as compared with 883,536.45 gross boxes for the year 1916, of which 487,988.30 gross boxes were of domestic make and 395,548.15 gross boxes were imported.

#### LICENSE TAXES.

*Dealers in alcohol and tobacco products.*—There were collected as privilege taxes during the fiscal year 1917 ₱922,786.56, as against ₱768,881.10 collected during the fiscal year 1916. Of this amount 27.1 per cent was paid by dealers in distilled and manufactured liquors; 37.9 per cent by dealers in tobacco products; 30.6 per cent by dealers in beer, tuba, bassi, tapuy, etc.; and 4.4 per cent by manufacturers and peddlers of liquors and tobacco.

*Merchants, manufacturers, and common carriers.*—There were collected as percentage taxes during the fiscal year 1917, ₱9,633,389.35 as against ₱6,819,776.27 collected during the fiscal year 1916. Of this amount 99 per cent was paid by merchants, manufacturers, and peddlers; 0.9 per cent by common carriers; and 0.1 per cent by publishers, contractors, warehousemen, restaurants, etc.

*Occupations, trades, and professions.*—There were collected as license taxes on occupations during the fiscal year 1917 ₱1,041,688.37 as against ₱859,215.13 during the year 1916. Of this amount 70.3 per cent was paid by the proprietors of cockpits and 29.7 per cent by lawyers, doctors, civil engineers, surveyors, photographers, and other occupation-license taxpayers. By the provisions of the internal-revenue law the license-tax collections from owners of cockpits



and the taxes on cockfights accrue intact to the treasuries of the various municipalities in which such taxes are collected. Seven hundred and twenty-eight municipalities and townships availed themselves of the provisions of the law authorizing the imposition by municipal councils of additional taxes on cockpits. The rate of the additional license taxes thus imposed ranges from ₱4 to ₱10,000 per year. There were 110 municipalities, townships, and municipal districts in which no cockpit licenses were issued during the period covered by this report.

*Cedulas.*—There were collected from the sale of cedula personas during the year ₱5,351,065 as compared with ₱4,486,657.50 during the preceding year, an increase of ₱864,407.50. There were sold 294,190 more cedulas during the year than during 1916.

*Banks and bankers.*—The following comparative statement, based upon the taxes assessed and collected, shows the average amount of capital employed by, average amount of deposits with, and average amount of circulation of banks during the period from July 1, 1915, to June 30, 1916, and from July 1, 1916, to June 30, 1917:

	July 1, 1915, to June 30, 1916.	July 1, 1916, to June 30, 1917.
Average capital.....	₱15,214,985.77	₱16,448,612.16
Average deposits.....	35,006,842.51	48,880,718.13
Average circulation.....	5,342,796.26	6,046,159.83

*Insurance companies.*—The following table, based on tax statements rendered, shows the total amount of each kind of insurance on which premiums were paid, and the average rate of premiums paid during the calendar years 1915 and 1916:

Kind of insurance.	1915		1916	
	Total amount of insurance.	Average rate of premium.	Total amount of insurance.	Average rate of premium.
		<i>Per cent.</i>		<i>Per cent.</i>
Fire.....	₱163,715,986.22	1.2	₱231,437,080.54	0.93
Marine.....	157,459,438.15	.5	136,398,797.29	.64
Life.....	29,945,944.50	.....	30,516,358.00	.....
Accident.....	1,026,445.00	1.0	961,600.00	.71
Fidelity and surety.....	8,697,642.70	.9	14,866,654.16	1.06
Typhoon and earthquakes.....	2,452,860.00	.5	3,595,040.00	.35
Motor cars.....	346,153.00	2.9	564,268.00	3.97
Personal baggage.....	3,206.55	.8	.....	.....
War (marine).....	1,050,000.00	.3	2,075,000.00	.49

#### FRANCHISE TAXES.

Of the amount of franchise taxes collected, ₱149,517.16 accrued to the insular treasury, ₱92,558.39 to Manila and other municipal treasuries, and ₱5,673.35 to provincial treasuries.

#### INCOME TAX.

There were collected as income tax during the calendar year 1917, ₱1,182,888.33 as against ₱529,607.97 collected during the calendar year 1916, an increase of ₱653,280.36, or 123.35 per cent. The increase was due principally to the corresponding increase of the rate of the normal tax to 2 per cent and to changes made in the scale of the additional tax, and the new income-tax law (act of Congress of Sept. 8, 1916).

The income-tax law has been recently amended by the act of Congress of October 3, 1917. One of the most important amendments introduced is the repeal of the provisions which allow nonresident aliens the specific exemption of ₱6,000 for single and ₱8,000 for married. To-day this provision is restricted to citizens or residents of the United States and, consequently, also

of the Philippine Islands. The exception made of the income tax paid from among the taxes deductible under the law is also another important amendment. From the effect of this and of the other provision a slight increase in the tax may also be expected, but the effect of the increase will not be shown until the report of the current year (1918) is rendered.

#### PEARL FISHING.

Under the provisions of Act No. 2604 there was collected during the year covered by this report the amount of ₱6,556.25, which accrues intact to the respective provincial treasuries where collected.

#### SPONGE FISHING.

Under the provisions of Act No. 2584 there was collected the amount of ₱602.61, of which 20 per cent accrues to the insular treasury, 40 per cent to the provincial treasuries, and 40 per cent to the municipal treasuries concerned.

#### BUREAU OF PRINTING.

##### VOCATIONAL TRAINING.

The various classes have not been maintained with a sufficient quota to provide for all requirements of the service, and it is believed that, owing to the lack of skilled workmen in the local field, the lower classes should be increased during the current year in order to provide competent craftsmen for future needs. In all 67 advances were made by apprentices and junior craftsmen during the year.

##### PERSONNEL.

There were 439 employees on the rolls of the bureau of printing on December 31, 1917. Of these 429, or 97.7 per cent, were Filipinos, and 10, or 2.3 per cent, Americans.

##### FISCAL OPERATION.

The product of the bureau for the fiscal year 1917 amounted to ₱1,018,660.89, while the cost of operation was ₱881,257.68, or a net profit on operation of ₱137,403.21 as against ₱86,543.90 of last year.

The work of the bureau was executed under 12,438 work orders, of which 7,363, amounting to ₱468,829.63, were for the Insular Government; 3,737, amounting to ₱223,406.74, for the provincial governments, including the city of Baguio; 719, amounting to ₱26,908.74, for the city of Manila; and for the Federal Government and outside parties 619, amounting to ₱34,535.90.

During the year there were issued from stock documents and publications and supplies to the value of ₱66,412.67 and stock forms to the value of ₱207,010.59.

##### APPROPRIATION.

The sum of ₱556,690, appropriated by Act No. 2672 for the bureau of printing for the fiscal year 1917, was not sufficient to cover the expenses during the year, and for this reason the bureau made appeal to the emergency board and to the Philippine Legislature for additional amounts aggregating ₱172,103.50. These additional amounts were caused by the considerable increase in production; by substantial increases in the first cost of materials and supplies; by the incidental enormous freight charges; by the large increase in the estimated amount of overtime and night work necessitated by the printing of the emergency circulating notes, publications of the Legislature, and emergency printing for departments and bureaus occasioned by new legislation; and by the large amount of printing incident to food-control and food-production propaganda.

Considering the bureau of printing as a producing establishment, the additional amounts requested over the appropriation for 1917 are, strictly speaking, not true deficiencies, but merely the investment of additional capital needed to meet the greatly increased output.

Respectfully submitted.

ALBERTO BARRETTO, *Secretary of Finance.*

THE GOVERNOR GENERAL OF THE PHILIPPINE ISLANDS,

*Manila.*



# REPORT OF THE SECRETARY OF JUSTICE.

DEPARTMENT OF JUSTICE,  
Manila, P. I., \_\_\_\_.

SIR: I have the honor to submit a report of the department of justice for the fiscal year ending December 31, 1917.

By virtue of the reorganization act, No. 2666, the following bureaus have now been placed under the jurisdiction of the secretary of justice: Bureau of justice, public-utility commission, code committee, courts of first instance and the inferior courts, bureau of prisons, and the Philippine Library and Museum. The same act has placed under the jurisdiction of the department of finance the following bureaus, which were formerly under its jurisdiction: Bureau of the treasury, bureau of customs, and the bureau of internal revenue. This report will no longer dwell upon the business transacted by the bureaus which have been placed under the jurisdiction of the secretary of finance.

## JUDICIARY.

### SUPREME COURT.

In accordance with section 133 of the Administrative Code of 1917, two more members have been added to the supreme court. Section 138 of said code authorizes the court to sit in banc and in divisions for the transaction of business, and in the latter case four judges are necessary to have a quorum. It also provides that two divisions may sit at the same time. With these amendments it is hoped to accelerate a great deal the work of our highest court in these islands. The addition of two justices would not have avoided the necessary accumulation of cases without authorizing the court to sit in divisions.

The following table shows the result of last year's work of the Supreme Court of the Philippine Islands as compared with that of the previous year in regard to the number of cases handled by said court:

	1916			1917		
	Civil.	Criminal.	Total.	Civil.	Criminal.	Total.
Cases pending at the end of previous year not disposed of.....	768	229	997	729	223	952
Cases filed during the year.....	614	397	1,011	624	444	1,068
Cases disposed of during the year.....	643	403	1,046	402	428	830
Cases remaining undisposed of.....	739	223	962	465	45	510

As may be seen from the foregoing table, the number of cases pending at the beginning of the year 1917 had been slightly less than those pending at the beginning of the previous year, the difference being 35. The cases filed during the year 1917 exceeded those of the previous year by 57. During the year 1917 there was less number of cases disposed of than the previous year, the difference being 216 less this year than there were last year. Aside from these cases there were 496 civil cases and 194 criminal cases, or a total of 690 cases, which have been docketed but not submitted for hearing.

During the year 1917 there were 373 applicants for the bar examination, 368 Filipinos and 5 Americans. Of these, 358 have actually taken the examination, 354 being Filipinos and 4 Americans, and 129 have actually passed, 1 American being included in this number.

Notaries public appointed by the supreme court during the year 1917, 213.  
Fees, fines, and court costs and bar-examination fees collected during the same period, ₱27,741.06.

## COURTS OF FIRST INSTANCE.

*Court of First Instance of Manila.*—The following table gives a summary of the business handled by the Court of First Instance of Manila during the year 1917:

*Civil cases.*

## Cases pending on Jan. 1, 1917:

Ordinary civil cases	421
Probate and guardianship cases (actuaciones especiales) more than 1 year, 169; more than 2 years, 123; more than 3 years, 139; more than 4 years, 125; more than 5 years, 112; more than 6 years, 77; more than 7 years, 74; more than 8 years, 52; more than 9 years, 26; more than 10 years, 33; more than 11 years, 14; more than 12 years, 14; more than 13 years, 19; more than 14 years, 3.	1, 177
Total pending	1, 598

## Cases filed during the year:

Ordinary civil cases—	
I branch	393
III and IV branches	421
Probate and guardianship cases (actuaciones especiales)	814
Total filed	1, 040

## Cases decided during the year:

Ordinary civil cases—	
I branch	273
III and IV branches	315
Probate and guardianship cases (actuaciones especiales)	588
Total decided	180

## Cases dismissed during the year:

Ordinary civil cases—	
I branch	97
III and IV branches	108
Probate and guardianship cases (actuaciones especiales)	205
Total dismissed	0

## Cases pending Dec. 31, 1917:

Ordinary civil cases—	
I branch	193
III and IV branches	249
Probate and guardianship cases (actuaciones especiales) more than 1 year, 176; more than 2 years, 145; more than 3 years, 108; more than 4 years, 128; more than 5 years, 120; more than 6 years, 97; more than 7 years, 71; more than 8 years, 68; more than 9 years, 46; more than 10 years, 17; more than 11 years, 25; more than 12 years, 9; more than 13 years, 6; more than 14 years, 8; more than 15 years, 1.	442
Total pending	1, 223

To facilitate comparisons with the work accomplished by the court in previous year, tabulated summaries showing the workings of the civil branches of the court during the fiscal year 1916 and during the fiscal year under consideration will be given hereinafter.

A summary of the civil cases filed during said years is as follows:

*Summary of civil cases filed.*

Fiscal year	Ordinary civil cases.	Probate cases.	Total civil cases filed.
1916.....	778	229	1,007
1917.....	814	226	1,040

DECISIONS AND DISMISSALS—CIVIL CASES.

The number of civil cases disposed of during the years 1916 to 1917 is as follows:

*Summary of civil cases disposed of.*

Fiscal year.	Ordinary civil cases.		Probate cases.		Total.		Total cases disposed of.
	Decided.	Dismissed.	Decided.	Dismissed.	Decided.	Dismissed.	
1916.....	529	218	154	1	683	219	902
1917.....	588	205	180	.....	768	205	973

*Criminal cases.*

Fiscal year 1917:

Number of criminal cases pending Jan. 1, 1917.....	138
Number of criminal cases filed during the year.....	1,560
Number of criminal cases decided during the year.....	1,329
Number of criminal cases dismissed during the year.....	182
Number of criminal cases pending on Dec. 31, 1917.....	187

The following tabulated statements, likewise given for the purpose of comparison, show the number of criminal cases filed and disposed of during the fiscal years above referred to.

*Statement of criminal cases filed.*

Fiscal year.	Cases filed.
1916	1,218
1917	1,560

DECISIONS AND DISMISSALS—CRIMINAL CASES.

*Statement of criminal cases disposed of.*

Fiscal year.	Decided.	Dismissed.	Total disposed of
1916.....	1,103	96	1,199
1917.....	1,329	182	1,511

*Customs appeal cases.*

Fiscal year 1917:

Cases pending on Jan. 1, 1917.....	4
Cases filed during the year.....	9
Cases decided during the year.....	10
Cases dismissed during the year.....	0
Cases pending Dec. 31, 1917.....	3

# 128 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

A combined summary of the number of customs appeal cases filed and disposed of during the years 1915 to 1917 is as follows:

## *Summary of customs appeal cases filed and disposed of.*

Fiscal year.	Cases filed.	Decided.	Dismissed.	Total disposed of
1915.....	12	18	.....	18
1916.....	12	5	7	12
1917.....	9	10	.....	17

## COLLECTIONS.

The collections made by the court during the year are as follows:

### Funds collected in civil matters:

Fines .....	₱105. 00
Costs and fees.....	17, 876. 00
Miscellaneous .....	6, 075. 24
	<b>₱24, 056. 24</b>

### Funds collected in criminal cases:

Fines .....	12, 842. 00
Costs .....	1, 409. 23
Miscellaneous .....	414. 25
	<b>14, 665. 48</b>

### Funds deposited in trust and all other funds received subject to repayment .....

163, 329. 37

Total..... 202, 051. 09

By comparing the foregoing figures with those for the preceding year it will be seen that while the collections made during the year in civil matters are approximately the same, ₱24,056.24 having been collected in 1917 against ₱24,013.57 collected in 1916, the funds collected in criminal matters are less than in 1916, when the collections in criminal matters amounted to ₱23,652.23. The amounts deposited in trust vary necessarily each year according to the circumstance of the cases involved.

It will be noted that the number of civil cases filed in the court of first instance of Manila during 1917 exceeded by 33 the number presented during 1916, when there were 1,007 cases filed. In 1917 there were 1,040 cases filed. The number of civil cases decided and dismissed in 1917 in the same court exceeded by 71 the number decided and dismissed during 1916, when there were 902 civil cases handled. In 1917 there were 973 civil cases decided and dismissed.

It will be observed that the number of criminal cases filed in the court of first instance of Manila during 1917 exceeded considerably the number filed during 1916, when there were 1,218 cases filed. In 1917 there were 1,560 cases filed. The increase in the number of cases filed has been gradual during the last two years. The number of criminal cases decided and dismissed during 1917 exceeded by 312 the number similarly handled during 1916, when there were 1,199 cases decided and dismissed. In 1917 there were 1,511 cases similarly handled.

In 1917 there were decided and dismissed 10 customs appeal cases, as compared with 12 customs appeal cases during 1916.

## PROVINCIAL COURTS OF FIRST INSTANCE.

The business transacted by the courts of first instance in the Provinces during the year 1917 is as follows:

### CIVIL CASES.

Ordinary civil cases pending on Jan. 1, 1917.....	3, 690
Probate cases pending on Jan. 1, 1917.....	2, 884
Land-registration cases pending on Jan. 1, 1917.....	873
There were filed during the year the following cases:	
Ordinary civil cases.....	3, 628
Probate cases.....	740
Land-registration cases.....	1, 062

Of the total number of civil cases, including the ordinary ones, probate, and land registration, 4,800 were disposed of by the courts of first instance, of all the Provinces, excluding Manila, in the following manner: Three thousand three hundred and eighteen were decided and 1,482 were dismissed.

The number of cases pending on December 31, 1917, were as follows: Four thousand three hundred and four ordinary civil cases, 2,853 probate cases, and 910 land-registration cases.

#### CRIMINAL CASES.

At the beginning of the year 1917, or on January 1, there were 2,774 criminal cases pending. During the year there were filed 7,990, making a total of 10,764 criminal cases in the hands of the courts during the year 1917. Of these, 4,025 were decided and 3,678 were dismissed, thus leaving pending on December 31, 1917, 3,061 criminal cases.

This information, compared with similar information contained in the annual report for the fiscal year 1916, shows plainly the comparative differences between the amount of work handled in these courts during the two years in question. There were 112 more land-registration cases, 472 more civil cases, and 116 more criminal cases filed in the Provinces in 1917 than during 1916.

There were pending on January 1, 1917, 3,680 ordinary civil cases, as compared with 3,627 such cases on January 1, 1916; 2,894 probate and 875 land-registration cases, as compared with 2,899 probate and 983 land-registration cases pending on January 1, 1916, making a total of 72 less cases pending at the beginning of 1917 than were pending at the beginning of 1916.

There were also an increase of 5 and a decrease of 113 in the number of similar cases decided and dismissed, respectively, or a total decrease of 108 in the number of cases disposed of on the civil dockets during 1917 as compared with 1916.

The number of ordinary civil cases pending on December 31, 1917, was 53 in excess of the number pending on December 31, 1916; the number of probate cases pending on December 31, 1917, was 15 less than the number pending on December 31, 1916; while the number of land-registration cases pending was reduced by 110, making a net decrease of 72 in all three classes of cases.

Relative to the criminal work, there were pending on January 1, 1917, 389 more cases than on January 1, 1916. There were 116 more cases filed in 1917 than during 1916, and the number of cases pending on December 31, 1917, exceeded by 272 the number pending on December 31, 1916.

The total collections for the courts of first instance in the Provinces during the year 1917 were as follows:

Cash receipts for legal costs, fees, and fines.....	₱149,511.28
Fees for land registration cases.....	39,040.90

The provincial courts have also received deposits, subject to refund, to the amount of ₱93,442.76.

#### JUSTICE OF THE PEACE COURTS.

As several reports of the courts of first instance concerning the business transacted in the justice of the peace courts have not yet been received, it has not been possible to include in this annual report the business done in the justice of the peace courts. When the data are completed the same will be forwarded separately.

#### GENERAL LAND REGISTRATION OFFICE.

A summary of the most important features of the work shows the following results, viz:

##### *Summary of work, fiscal year 1917.*

#### Cadastral cases:

Number of cadastral cases filed (cadastral docket).....	22
Approximate number of parcels covered by cadastral cases filed.....	13,087
Total number of cadastral cases disposed of by the courts (cadastral docket).....	27
Approximate number of parcels included in cadastral cases disposed of by the courts.....	14,857



# 130 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

## Registration cases:

Number of applications filed (general docket).....	977
Total number of cases disposed of by the courts (general docket).....	985
Appeals taken to supreme court (general docket).....	59

## Publications:

Total number of cases published in Gazette.....	1, 016
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## Decrees:

Total number of cases in which decrees issued.....	1, 005
Total number of decrees issued.....	37, 762
Total number of parcels covered by decrees.....	40, 779
Total area decreed, square meters.....	1, 583, 599. 495

## Reservations:

Total reservations instituted—	
Civil .....	33
Military .....	None
Total number of parcels covered by reservations instituted.....	65
Approximate area reserved, square meters.....	11, 471, 501

## Collections and expense:

Receipts (not including provincial collections).....	P8, 117. 23
Total cost of publication, Official Gazette.....	P14, 238. 95
Approximate total expense of the office.....	P168, 444. 20

## Property value:

Approximate value of properties included in cases instituted in—	
Manila .....	P459, 404. 00
Provinces .....	P3, 930, 435. 40
Total .....	P4, 389, 839. 40

A comparison of the foregoing figures with those of the preceding annual report shows a slight diminution in the number of cases decided by the courts of first instance, not only regarding cadastral cases but ordinary cases as well, and, on the contrary, there has been a considerable increase in the number of decrees issued, as well as in the total number of parcels included in the same, and the actual area covered in said decrees being represented in the sum of 1,583,599.495 or an effectual increase during the year of 800,373,796 square meters of registered lands.

## GOVERNMENT APPLICATIONS FOR REGISTRATION.

The total number of applications for the registration of title filed during the fiscal year 1917 by the insular, provincial, and municipal governments, under Acts Nos. 496, 926, and 2259, is as follows:

### Filed by the Insular Government under—

Act No. 496.....	2
Section 61, Act No. 926 (cadastral docket).....	5
Act No. 2259, the cadastral act.....	17

Total .....

Filed by provincial governments.....

Filed by municipal governments.....

Grand total..... 110

## CADASTRAL CASES.

The following tabulated statement, by Provinces and the city of Manila, shows the total number of cadastral cases filed up to December 31, 1917, and the approximate number of lots included therein, viz:

*Statement of cadastral cases filed.*

Provinces.	Number filed during fiscal years—						Total.	
	1907 to 1915		1916		1917			
	Cases.	Approximate number of lots.	Cases.	Approximate number of lots.	Cases.	Approximate number of lots.	Cases.	Approximate number of lots.
Albay.....	1	821	1	907	.....	.....	2	1,728
Bataan.....	3	1,475	.....	.....	1	3	4	1,478
Cagayan.....	.....	.....	2	3	.....	.....	2	3
Camaringes.....	1	10	.....	.....	1	10	2	20
Cavite.....	3	993	.....	.....	.....	.....	3	993
Cebu.....	12	12,562	.....	.....	.....	.....	12	12,562
Ilocos Norte.....	7	6,418	.....	.....	.....	.....	7	6,418
Ilocos Sur.....	1	13	.....	.....	.....	.....	1	13
Iloilo.....	30	23,810	.....	.....	.....	.....	30	23,810
Laguna.....	.....	.....	.....	.....	1	443	1	443
Leyte.....	2	155	.....	.....	.....	.....	2	155
Manila.....	16	1,009	10	1,833	3	475	29	3,317
Mindoro.....	2	92	.....	.....	.....	.....	2	92
Misamis.....	.....	.....	.....	.....	1	1	1	1
Nueva Ecija.....	3	833	2	1,751	2	1,783	7	4,367
Nueva Vizcaya.....	1	492	.....	.....	.....	.....	1	492
Occidental Negros.....	9	9,334	4	4,706	2	1,945	15	15,985
Palawan.....	4	339	2	235	.....	.....	6	574
Pampanga.....	.....	.....	.....	.....	7	6,289	7	6,289
Pangasinan.....	32	25,996	.....	.....	1	1	33	25,997
Rizal.....	6	3,360	1	22	.....	.....	7	3,382
Tarlac.....	3	138	2	1,671	2	2,136	7	3,945
Tayabas.....	1	12	.....	.....	1	1	2	13
Union.....	.....	.....	1	1	.....	.....	1	1
Zamboanga.....	10	5,922	.....	.....	.....	.....	10	5,922
Total.....	147	93,784	25	11,129	22	13,087	194	118,000

The status of all cadastral cases filed to December 31, 1917, and the approximate number of lots covered by such cases is shown in the following statement:

Status of all cadastral cases on Dec. 31, 1917.	Fiscal year, 1917.					
	Affirmed.		Dismissed.		Total.	
	Cases.	Lots.	Cases.	Lots.	Cases.	Lots.
Decision final.....	13	5,765	.....	.....	13	5,765
Decided, pending order for issuance of decrees.....	13	8,813	.....	.....	13	8,813
Appealed to Supreme Court.....	1	279	.....	.....	1	279
Total year's business.....	27	14,857	.....	.....	27	14,857
Previous appeals pending.....	1	14	.....	.....	1	14
Prior final disposition made.....	125	83,008	2	520	127	83,528
Total business transacted.....	153	97,879	2	520	155	98,399
Pending on the dockets.....	.....	.....	.....	.....	39	19,601
Total cases, Dec. 31, 1917.....	.....	.....	.....	.....	194	118,000

<sup>1</sup> Fifty-seven (57) of these cases are also included in the summary of applications given at page 11 of this report, and in the statement showing the status of all cases given at page 12.

## VALUE OF PROPERTY REGISTERED UNDER ACT No. 496.

As stated in this report, 977 ordinary applications have been presented during the year; of these 52 refer to property situated in the city of Manila, with an assessed value of ₱459,404, and 925 cover property situated in the Provinces, with an assessed value of ₱3,930,435.40.

# 132 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

A summary of the applications filed and of the assessed values of the properties presented for registration during 1917 and the five preceding years is as follows:

Manila.			Provinces.		
Fiscal year.	Cases.	Valuation.	Fiscal year.	Cases.	Valuation.
1913.....	214	P4,951,265.00	1913.....	716	P16,862,215.72
1914.....	104	3,834,598.98	1914.....	515	4,453,398.22
1914 (new).....	192	4,570,019.00	1914 (new).....	710	3,767,767.00
1915.....	117	2,087,037.00	1915.....	579	5,283,624.35
1916.....	67	1,430,730.00	1916.....	903	5,191,045.61
1917.....	52	459,404.00	1917.....	925	3,930,435.49

## RECEIPTS.

The receipts of the office for the collections made during the fiscal year 1917 amounted to P8,117.23. Of this sum, P598.52 has been collected as deposit and the remaining P7,518.71 constitute the revenue.

In addition to this, during the year 1917 the sum collected by the clerks of courts of first instance throughout the islands is P39,040.90 as registration fees from applications filed in the Provinces, the sum of P3,464.15 has accrued to the insular government from registration costs issued in cadastral cases from various Provinces.

## EXPENSES.

An approximate statement of the cost of maintenance of the general land registration office during the fiscal year 1917, classified under appropriate headings, is as follows:

*Expenses incurred by the general land registration office during the fiscal year 1917.*

Purposes.	Fiscal year 1917.
Salaries and wages.....	P111,331.74
Purchase of furniture and equipment.....	7,194.67
Repair of furniture and fixtures.....	342.50
Freight, express, and delivery service.....	515.54
Printing and binding.....	553.33
Postal, telegraph, telephones, and cable service.....	7,553.68
Illumination and power service.....	592.94
Publication of notices in the Official Gazette, subscriptions, laundry, street-car tickets, rental of box, repairing electric wire, and proportionate share of watchmen's services.....	13,530.28
Consumption of supplies and materials.....	16,735.64
Travelling expense of personnel.....	279.50
Rent of office.....	4,036.45
Total.....	168,444.30

## ORIGINAL AND DUPLICATE CERTIFICATES OF TITLE PREPARED BY THE OFFICE.

Thirty-seven thousand five hundred and twenty-six certificates of title with their corresponding duplicates have been issued by this office during the year, thus enabling the property owners to obtain their Torrens titles immediately upon the issuance of the decrees.

## CODE COMMITTEE.

The code committee, created by Act No. 1941 of May 20, 1909, has ceased to exist on June 30, 1917, due to the fact that the appropriation act, No. 2672, for 1917 has provided for said office up to June 30, 1917, only.

The committee was originally composed of a president and four members. It was not fully organized until April 1, 1910, when its president was appointed. The frequent changes in the personnel of the committee has been

a great obstacle in its achievement. Soon after it was fully organized Hon. Rodhe, one of its members, resigned in July, 1910, and his successor did not take possession of his office until the 22d of November of the following year. Another member of the committee, Hon. Araullo, was appointed to the Supreme Court of the Philippine Islands on December 16, 1913; and another one, Hon. Del-Pan, died in May, 1915. Hon. Adriatico, who was appointed in March, 1914, had been ill and unable to work for a year.

In spite of these disadvantages the committee has been able to accomplish a great deal by completing the following work: Administrative Code, Correctional Code, and the Code of Procedures, which includes the Codes of Civil Procedure and Criminal Procedure; compilation of royal decrees, ordinances, and regulations concerning public lands during the Spanish sovereignty; index to the Philippine Reports from Volume I to Volume XII; comment and translation of the negotiable instruments act. The committee has also submitted some amendments to the Penal Code and Code of Civil Procedure and given advice to Government offices and officials from time to time. The Civil Code, which was to embody the articles contained in both the Civil Code and Commercial Code, has not been completed.

#### PUBLIC UTILITY COMMISSION.

##### WORK OF THE COMMISSION.

There were 141 new cases filed during the year, as against 116 for the year 1916. Decisions and orders were issued in 113 cases. This does not include matters disposed of by correspondence without making them into cases.

The 141 new cases coming before the commission may be classified roughly as follows:

Sales of ships .....	30
Rate changes .....	36
Complaints re overcharges or existing rates .....	15
Franchises or certificates of public convenience .....	12
Issuance by public utilities of stocks, bonds, notes, or mortgages .....	5
Changes of classification of ports .....	3
Service of public utilities .....	28
Miscellaneous .....	12
Total .....	141

The cases relating to the sale of ships embrace all kinds of transactions entered into by water transportation operated as a public carrier.

Of the 36 cases relating to rate regulations the most important was the proposed 50 per cent additional freight rate increase by the Philippine Shipowners' Association. There were several others of local importance which have taken up a considerable portion of time, among these being cases No. 847, the proposal of the Cebu Shipowners' Association to increase rates by 60 per cent; No. 878, being the proposal of the Manila Railroad Co. to increase its freight rates on sugar cane, to which considerable objection developed; No. 880, the proposed Manila Railroad Co. increase of freight rate on grass; Nos. 897 and 899, the proposal of Teodoro R. Yangco to collect 20 per cent more for government shipments than for shipments made by the public; and No. 920, the proposal of the Manila Railroad Co. to cancel its tariff No. 115, this being a special rate on muscovado sugar, known as the "milling in transit rate," which cancellation was opposed by the Calamba sugar estate. In all of these cases it was necessary to hold several hearings.

#### ACCIDENTS.

The yearly reports of accidents of the Manila Electric Railroad & Light Co. and its Manila line shows that there were 16 serious accidents and 1,297 minor accidents. Under this heading of accidents there are included collisions, falling from cars, pedestrians struck by car, derailments, persons or animals coming in contact with live wires, animals struck by cars, and grade-crossing accidents.

The number of casualties to passengers reported by said company for its Manila branch during the year 1917 were as follows:

Killed .....	1
Seriously injured .....	3

# 134 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

Slightly injured .....	219
Casualties to employees:	
Seriously injured .....	2
Slightly injured .....	117
Casualties to other persons:	
Killed .....	2
Seriously injured .....	5
Slightly injured .....	90

The report of accidents of the Manila Suburban Railways Co. for the year 1917 is as follows:

Number of serious accidents .....	5
Number of minor accidents .....	117
Casualties to passengers, slightly injured .....	41
Casualties to employees:	
Killed .....	1
Seriously injured .....	1
Slightly injured .....	3
Casualties to other persons:	
Killed .....	1
Slightly injured .....	1

The yearly report of the Philippine Railway Co. shows that there were 1 person killed and 6 persons injured during the year.

## PUBLIC UTILITIES.

At the close of the year 1917 there were in the Philippine Islands 80 companies or individuals carrying passengers and freight by water. This list is far from being complete, because the collection of data regarding small craft has been started very recently.

The public utilities in the islands, according to the records of the commission, include, beside the water transportation above mentioned, 1 electric street railroad, 17 telephone companies, 16 electric-light companies, 2 steam railroad systems, and more than 250 automobile lines. The term automobile lines means separate companies or individuals engaging in this service, although some of them operate only one automobile.

## BUREAU OF JUSTICE.

The following is a brief statement of the business transacted by the bureau of justice during the fiscal year 1917:

Cases in the supreme court in which the acting attorney general presented briefs and arguments .....	420
Cases in the supreme court in which acting attorney general appeared by motions, etc .....	420
Cases conducted in the court of first instance of Manila .....	250
Cases conducted in the courts of first instance by representatives of the solicitor general's office in the different Provinces throughout the islands .....	150
Cases conducted for the public utility commission in the Provinces .....	3
Cases conducted for the public utility commission in Manila .....	4
Cases conducted in the justice of the peace court of the city of Manila .....	1,707
Investigations against attorneys in private practice .....	18
Other administrative investigations .....	2
Land-registration cases in which this office appeared and opposed registration .....	455
Land-registration cases examined by this office in which no opposition was presented .....	704
Land-registration cases in which the insular government was the applicant .....	44
Civil, military, and naval reservation cases conducted by attorney general's office on behalf of the representative entities interested therein .....	23
Formal opinions rendered by the acting attorney general to the chief executive, heads of departments, chiefs of bureaus and other officials, and the Philippine National Bank .....	282
Philippine National Bank applications and mortgages passed on .....	665

Instruments prepared for the Philippine National Bank.....	514
Drafts of mortgages prepared for the Postal Savings Bank board.....	96
Discharges of mortgages for the Postal Savings Bank board.....	43
Administrative circular letters issued to bureau of justice and judiciary employees, including provincial fiscals.....	51

The opinions submitted by the solicitor general, to which reference is made in the above statement, may be subdivided as follows:

To the Governor General, heads of departments, and to the Philippine Legislature.....	94
To chiefs of bureaus.....	158
To the Philippine National Bank.....	2
To the Postal Savings Bank.....	2
To the provincial fiscals.....	21
To all other persons, including municipal officials of the Provinces not provided with fiscals.....	5

The difference in the amount of legal service rendered during 1917 as compared with 1916 is, in number of cases, 2,111 more than during 1916, when there were 2,069 handled. In 1917 the attorney general's office handled 4,180 cases.

The work of the bureau of justice during the year 1917, as compared with the preceding year, increased considerably, due to the handling in court proceedings of 2,111 more cases during 1917 than in 1916.

There were 665 applications and mortgages examined and approved for the agricultural department of the Philippine National Bank during 1917, as compared with 234 applications and mortgages during 1916, making an increase of 431 applications and mortgages examined and approved during 1917. There were 514 instruments prepared in this bureau for said bank during 1917, an increase of 499 instruments as compared with 1916. It will thus be noted that the volume of work handled for the Philippine National Bank increased greatly during 1917 as compared with 1916.

#### ADMINISTRATION OF ESTATES OF DECEASED GOVERNMENT EMPLOYEES.

The number of estates of deceased employees of the Philippine Civil Service, the administration of which is the duty of the attorney general under the provisions of sections 1667 to 1671, inclusive, of the Revised Administrative Code, is constantly decreasing, in view of the fact that many American employees are from time to time leaving the service under the provisions of the retirement act.

There were four officers and employees of the insular service whose deaths occurred within the period covered by this report, the settlement of whose estates devolved upon the attorney general. During the same period the administration of six deceased employees of the Philippine Government was terminated.

#### *Funds, estates of deceased employees.*

Balance Dec. 31, 1916.....	P2, 325. 36
Receipts, fiscal year 1917.....	4, 493. 54
	<hr/> 6, 818. 90
Disbursements, fiscal year 1917.....	5, 863. 39
Balance Dec. 31, 1917.....	955. 51
	<hr/> 6, 818. 90

#### BUREAU OF PRISONS.

On December 31, 1917, the prison population of the Philippine Islands was distributed as follows:

Billbid Prison.....	2, 495
Iwahig penal colony.....	1, 201
Members of the colonists' family.....	1 40
San Ramon penal farm.....	599

<sup>1</sup> Not included in total.

Working at Corregidor.....	1, 132
Constabulary stations.....	14
Insular prisoner working at provincial jail.....	1
San Lazaro Insane Asylum.....	49
City Boys' Reformatory School.....	57
City Girls' Reformatory School.....	8
Luneta Police Station.....	35
Confined in provincial prisons.....	1, 350

Total..... 6, 941

The total number of insular and provincial prisoners on hand on December 31, 1916, was 6,867, while on December 31, 1917, there were, as shown above, 6,941 in confinement, an increase of 74 prisoners.

The average number of insular prisoners in confinement daily during the year was 5,618.72, while the average number during the period covered by the previous report was 5,652.39, a decrease of 33.67.

The number of provincial prisoners on hand December 31, 1916, was 1,303, and on December 31, 1917, 1,350, an increase of 47.

#### BILIBID PRISON.

The number of prisoners in Bilibid Prison on December 31, 1916, was 2,520, and on December 31, 1917, 2,495, a decrease of 25.

The following is a summary of changes in the prison population of Bilibid Prison during the past year:

On hand Dec. 31, 1916.....	2, 520
Received by commitment.....	3, 997
Received from capture.....	1
Received by transfer from other stations.....	815
Total.....	7, 333
Released by expiration of sentence.....	3, 118
Released by payment of fine.....	107
Satisfaction of fine and sentence.....	19
Presented cedula.....	10
Released on bond.....	173
Acquitted.....	29
Cases dismissed.....	23
Released by order of the court.....	20
Banished.....	1
Conditionally pardoned.....	217
Unconditionally pardoned.....	15
Paroled.....	3
Released by order of the Governor General.....	1
Released by habeas corpus.....	1
Deported.....	33
Deaths.....	107
Escaped.....	1
Transferred to other stations.....	960
Total.....	4, 839

On hand Dec. 31, 1917..... 2, 495

The number of commitments by the court was 3,997 as against 4,265 for the year 1916.

Of the 3,997 prisoners committed this year, there were only 874 from the Provinces, while 3,123 were from Manila as against 985 from the Provinces and 3,280 from Manila last year. Those committed from Manila include short-term municipal prisoners, while those from the Provinces are all insular prisoners, excepting those convicted of opium habit, who are sent to Bilibid for treatment regardless of their status. The principal crimes, and those which show the greatest increase, are arson, domestic theft, embezzlement, homicide, and theft.

## CONDUCT OF PRISONERS.

Several trusty prisoners have been reported as implicated in the wholesale theft of copra and other farm products at San Ramon; the case has been placed in the hands of the judicial authorities for investigation and appropriate action.

Eight escapes were reported from the San Ramon penal farm, including those reported at large the previous years, while the colonists of Iwahig have observed a perfect conduct throughout the year, and no escapes nor crimes were reported.

No prisoner from Bilibid was brought before the court for crimes committed within the walls of the prison, and the number of infractions of prison regulations disposed of by the prisoners' court during the year shows a decrease of about 120.

## PRISONERS' COURT.

For two and a half years the prisoners' court has been in operation and continues to offer much satisfaction to the prisoners. The personnel of the court is made up of a president, four judges, one prosecuting attorney, one sheriff, and two assessors. Prisoners brought before the court are permitted to testify in their own defense, furnished a defender, and authorized to call such witnesses as they may desire. During the period covered by this report there were 2,848 cases disposed of, of which in only 248 cases, or about 8 per cent, were its findings modified by the reviewing authority—the director of prisons. The members of the court have been so faithful and enthusiastic in the conscientious performance of their duties that in no case has it been found necessary to remove any of them from office for abuse of privileges conferred upon them.

Aside from the cases mentioned under the "Conduct of prisoners," the majority of cases tried were for minor infractions of prison regulations, such as loafing, neglect of duty, lying, stealing, and petty assaults, with punishments ranging from loss of one meal to reduction to third class or forfeitures of good-time allowance earned.

## MAINTENANCE.

*Cost of prisoners' maintenance.*

Prison.	1916			1917		
	Average number prisoners per day.	Average cost maintenance per year.	Total cost.	Average number prisoners per day.	Average cost maintenance per year.	Total cost.
Bilibid.....	3,849.12	P105.5284	P406,191.83	3,791	P127.36484	P482,840.14
Iwahig.....	1,235.77	89.2484	110,290.48	1,201	68.72833	82,542.73
San Ramon.....	567.5	30.45778	17,284.79	599	88.42844	52,968.64

In spite of the war conditions, which greatly advanced the prices of commodities, with the tendency of further advances, it is gratifying to note that the San Ramon Penal Farm shows only an increase of about P0.158 per capita in the maintenance of its prisoners, while the Iwahig Penal Colony reports a decrease of P0.056, the latter being due to the increased consumption of colony products in the ration components. The total cost of subsistence for the Iwahig Penal Colony during the period covered by this report is P54,367.92, of which P27,778.97, or more than 50 per cent, represents colony products. Such small increase, in spite of the great increase in the prices of articles sold at public market, has been accomplished by the increased use of its own farm products and the consequent reduction in the purchase of subsistence from outside. The total cost of subsistence issued to prisoners at San Ramon during the year is P82,910.07, of which P27,180.01, or 97 per cent, are farm products. On the other hand, the bureau of prisons shows a slight increase in the net cost of



maintenance of prisoners, the average cost per capita per diem this year being ₱0.29908 as compared with ₱0.299086 last year. This is due to the present war conditions, which materially advanced prices of commodities. The total cost of maintenance of the prisoners confined at Bilibid is ₱0.348944 as compared with ₱0.336081 for the last year.

Consistent with the present food campaign initiated by the Government and in an effort to minimize the increased expenditures consequent upon the present high cost of subsistence supplies, the bureau of prisons has recently established a vegetable garden within the prison reservation, covering an area of about 6 acres, and planted beans, mustard, radish, and other greens, which now produces, more or less, about ₱250 or ₱300 monthly in money value. The bureau of prisons has constantly been urging the provincial wardens of the various jails to establish, whenever practicable, a vegetable garden in the prison's yard for the purpose of augmenting the prison ration, and, as a result thereof, some of the provincial wardens have organized small vegetable gardens at the jail.

#### RELIGIOUS SERVICES.

Religious services have been conducted by the prison chaplain regularly on Sundays each week and visits to the prison and prison hospital were made by him or his assistants almost every day.

Services were also conducted by volunteer Protestant ministers regularly on Sunday mornings.

There were about 3,500 magazines, pamphlets, and books on religious literature distributed among the prisoners during the year.

#### INDUSTRIAL DIVISION.

The net profit of the division from operation is ₱65,013.22, to which should be added the amount of ₱10,365.36, which has been paid by this division for its pro rata share of the office expense of the bureau of prisons, which brings the net earnings to ₱75,378.58, against ₱57,409.69 in 1916, an increase of ₱17,968.89.

The use of stripped bejuco imported from China is continually on the decrease and very little of this material is now being required.

Due to the increased use of motor vehicles a separate auto-repair shop had to be established and placed in charge of an experienced auto mechanic. This shop is at present taxed to the limit with work and promises to be one of the principal departments of the industrial division.

Another important feature is the manufacture of standard carabao carts and cart wheels, built according to plans prepared by the bureau of public works. With the increased construction of new roads throughout the islands, the demand for Bilibid carts is steadily becoming greater, but this work was handicapped for several months during the year by the high price and scarcity of tire steel and the impossibility of securing hub blocks.

Referring back to the financial showing it should be stated that the nine Provinces have been sent to Bilibid Prison for a thorough course of instruction division is insignificant when compared with the moral results obtained by the transformation of unskilled criminals into trained artisans, willing workers, and useful members of society.

#### PROVINCIAL PRISONS.

Through the medium of the monthly reports of inspection of the provincial commanders of constabulary and the reports of the honorable judges of the courts of first instance, this office has been kept well informed of the conditions and developments of the provincial jails throughout the islands, and it has thus afforded the bureau of prisons the opportunity to make such suggestions as conditions and circumstances required, which suggestions have been, in the majority of cases, given due consideration by the provincial governors and wardens.

Upon recommendation of the director of prisons, 21 jailers from the various Provinces have been sent to Bilibid Prison for a thorough course of instruction and training, which involves a complete course on every phase of prison management. As a result of such a practice, numerous improvements have been accomplished during the year. The provisions of the rules and regulations for the government of insular and provincial prisoners have thus been gradually extended and observed in every provincial jail in the islands.

## SCHOOLS.

The school is decidedly elementary in character, emphasizing, principally, the English language. The following is a list of subjects taught in the different grades:

Grade I. Arithmetic, reading, writing, spelling.

Grade II. Arithmetic, reading, writing, spelling, dictation and composition from subjects studied.

Grade III. Arithmetic, composition, reading, American history, Philippine history, geography, spelling, grammar.

Grade IV. Arithmetic, composition, American history, Philippine history, grammar, geography.

Grade V. Arithmetic, composition, American history, Philippine history, grammar, geography.

The program outlined is as comprehensive as practice permits of; various subjects and studies are introduced through the medium of "conversational English," which is practiced throughout all grades. Not the least important, however, are the elementary talks on "health and sanitation," which are introduced as digressions but are in reality subjects for conversational English as well as being of paramount importance to the pupil.

The mechanical drawing class has proven to be a feature of the school; numerous drawings, designs, etc., are supplied to the industrial division by this section of the school.

The attendance on December 31 was as follows:

Grade I.....	296
Grade II.....	101
Grade III.....	54
Grade IV.....	42
Grade V.....	13
Mechanical drawing.....	18.
<b>Total.....</b>	<b>524</b>

## HEALTH.

The following extract is taken from the report of the prison sanitation division of the bureau of prisons:

	1916	1917
Comparison of sick rate per thousand.....	103.8	60.6
Comparison of contagious diseases, number of cases.....	12	21
Comparison of death rate per thousand.....	7.74	12.3

During the year 107 deaths occurred at Bilibid, as against 58 from the various outstations, and died within four months after return therefrom. Of the 107 cases of death which occurred at Bilibid 76 are from tuberculosis, the rest being from general diseases. The deaths at the various outstations were as follows:

Iwahig Penal Colony.....	23
Corregidor.....	89
San Ramon Penal Farm.....	4

During the latter part of the year the overseer in charge of the prisoners at Corregidor reported that a serious epidemic of conjunctivitis, caused by Koch-Weeks bacillus infection, existed among the prisoners detained at that station. A board of medical officers investigated the situation without delay, and toward the close of the year very few of the 332 infected had not recovered.

The following table shows the causes of death during the year:

Typhoid fever.....	1
Malaria.....	1
Amoebiasis (Hist).....	1
Tuberculosis.....	76
Carcinoma of the liver.....	1

Carcinoma of the stomach.....	1
Cerebrospinal meningitis, acute, suppurative.....	1
Cerebral congestion.....	1
Epilepsy, gran mal.....	1
Glioma of the brain.....	1
Cardiac dilatation.....	2
Endocarditis.....	1
Mitral stenosis.....	1
Valvular disease.....	1
Pneumonia.....	9
Gangrene of lung.....	1
Appendicitis, acute, perforative.....	1
Acute nephritis.....	1
Abscess of kidney.....	1
Vesical calculi.....	1
Diseases of the urethra.....	1
Septicemia, following abortion.....	1
Shock, following trauma of head.....	1
Total.....	107

## IWAHIG PENAL COLONY.

The general conditions of the colony are exceedingly gratifying. Considerable progress has been made during the year in the construction of roads and buildings, 14,000 coconuts have been planted, an increase of 78 head in live stock is reported; the value of all these being more than ₱220,000. In 1916 the value of all improvements in this colony was estimated at ₱100,000.

During the year no crimes have been reported committed by colonists, and in no instance has a report of misconduct been made against those who were being granted permission from time to time to visit points beyond the colony reservation, nor against those who were being detailed for work beyond the limits of the reservation.

	1916	1917
Cost of operation of the colony.....	₱175,868.25	₱125,113.30
Income of the colony.....	36,617.71	39,511.25

## SAN RAMON PENAL FARM.

San Ramon has been less fortunate this year, it having been visited by three destructive floods, which caused inestimable losses and damages. This will naturally decrease the farm productions for the ensuing year.

	1916	1917
Cost of operation of San Ramon penal farm.....	₱99,097.97	₱96,810.39
Income of the San Ramon penal farm.....	78,148.81	73,458.97

## MISCELLANEOUS.

*Compensation act.*—Since the operation of the compensation law, Act No. 2489, prisoners have shown increased interest in the work assigned to them in an effort to obtain a workmanship classification.

On December 31, 1917, there was a total of 587 workmen on compensation roll, rated as follows: 176 first-class, 166 second-class, 245 third-class, as against 601 of the previous year. The decrease is due to the fact that a great number of those enjoying workmanship classification have been discharged during the year, and very few promotions have been made on account of lack of funds. The average number of classified workmen per month during 1916 is 532.5 as against 655.16 for the present year. A total of ₱14,372.30 was paid to discharged prisoners by operation of this act, as compared with ₱11,897.20 of last year.

*Escapes.*—There were a total of 7 escapes during the period covered by this report, as compared with 10 of last year. Five of these escapes took place at San Ramon; 2 on April 11 and 3 on November 27.

*Pardon.*—During the year his excellency the Governor General has extended executive clemency to 332 prisoners, as against 378 of last year. The great majority of those pardoned were serving sentence for brigandage and have served generally more than 10 years' imprisonment with excellent conduct; also a goodly number of adultery cases have been pardoned by the Governor General.

*Amusements.*—Having in mind the depressed mental condition that may attend prisoners in confinement, it was endeavored to procure as much wholesome amusement as possible for the entertainment of prisoners. Cinematograph functions, which continue to be a source of much gratification to the prisoners, have been given every Saturday and Sunday evenings, and on special holidays. Through the generosity and kindly cooperation of the "Sociedad Los XX" and other visiting artists, theatrical performances, musical and vocal concerts have been given on special occasions, such as Christmas, New Years, and July the 4th. Special mention is due the Universal Film Exchange Co., through the kindness of which company it has been possible to supply our cinematograph with excellent programs free of charge.

#### PHILIPPINE LIBRARY AND MUSEUM.

##### SERVICE.

*Deposit Libraries.*—For the benefit of those government employees who, on account of their official duties, are unable to avail themselves of the library privileges, deposit libraries were continued during the year. (See Circulating division, American Circulating Library.)

By enacting section 7 of Act No. 2572, the Philippine Library and Museum has been empowered to receive 50 copies of all printed reports or documents, published by departments, bureaus, offices, dependencies, municipalities, and Provinces relative to their official work; and two copies of each book, newspaper, or pamphlet printed or published by printing establishments of the Islands.

Under these provisions the bureau of printing has cooperated in securing documents and reports of government institutions for the library and museum and they have been received as far as available. With the exception of a few printing establishments, all publications published in the Philippine Islands are being regularly received.

##### BRANCH LIBRARIES.

Next to the public-school system, a national library with branches throughout the archipelago is the most effective means of bringing about lasting intellectual advance, and the nationalization of our mental and moral resources.

The program, therefore, toward the dissemination of this culture through the extension of library facilities by means of branch libraries has met with general approval.

The provincial board of Cebu, in its resolution No. 358 of this year, has appropriated ₱600 to be expended for the establishment of a branch in that locality from September 1 to December 31, 1917. There also exists a library fund to the amount of ₱2,000, collected in an entertainment, which will be available when the branch in that locality is definitely established. The books of the library of the municipal council of Cebu were also transferred to the Cebu branch library.

The library has been training young men who would be available for service in provincial libraries. The apprenticeship system as carried out by the Philippine Library and Museum has developed young men who are now engaged in library work. For apprentice work, students of the university and of high schools have been selected. With their preparation and training they are better able to undertake the work. The daily practice in the library renders them accurate and efficient. In conjunction with the above, the University of the Philippines had opened a library science course, which no doubt will turn out young men and women who wish to follow library work as their profession.

##### LEGISLATIVE REFERENCE DIVISION.

The two years' existence of the legislative reference division has been a test as to its usefulness to the legislature and the various departments of the Government. With a workable collection of statutes and well-selected treatises on

subjects touching legislation, as well as the service of a competent staff, this division has been able to fulfill with credit its important mission—"the organization, preservation, equipment, and maintenance of a special administrative and legislative reference library to be of aid to the several departments of the Government, and especially to the houses of the Philippine Legislature, their committees, or members in the consideration, preparation, and drafting of bills" (Administrative Code, 1917, sec. 1619(e)) in spite of its imperfect organization.

The library of this division possesses a fairly complete collection of session laws and statutes of the different States and Federal laws of the United States and of some foreign countries, cyclopedias, judicial reports, and well-selected textbooks on social and political science. The documents section thereof is the official depository of United States documents and continues to receive regularly, on exchange basis, publications from State governments of the United States and from various foreign countries.

Efforts have been made toward the building up of the resources of the division by purchase, through exchange, and requests, the results of which have been encouraging. Clipping has been made of articles in local newspapers.

*Statistical records of the legislative reference division's library for the year 1917.*

Books reported, 1917.....	4, 078
Books received by purchase.....	535
Books received by gift.....	155
Pamphlets reported, 1917.....	101, 831
Pamphlets transferred to documents.....	100, 807
	<hr/>
Pamphlets received by gift.....	1, 124
	<hr/>
Grand total.....	7, 119
Books issued at desk.....	16, 977
Readers.....	3, 011
Books loaned.....	201
Borrowers.....	108
Books catalogued.....	690
Cards written.....	4, 571
Pamphlets, subjects catalogued.....	746
Subject cards written for pamphlets.....	846
Government publications sent out for exchange:	
Bound.....	27
Unbound.....	421
Slips.....	684
Cards written for periodical clippings.....	1, 214

The division has drafted 159 bills and has given 105 opinions and reports to all the executive departments and several bureaus of the Insular Government as well as to members of the Legislature.

*Summary list of documents in the Philippine library and museum.*

United States depository:	
Bound.....	879
Unbound.....	7, 314
United States nondepository:	
Bound.....	1, 132
Unbound.....	50, 514
State documents:	
Bound.....	1, 745
Unbound.....	11, 094
Philippine documents:	
Bound.....	464
Unbound.....	79, 563
Foreign documents:	
Bound.....	280
Unbound.....	8, 749

<sup>1</sup> Mainly used by law students.

<sup>2</sup> Students are in the majority.

Miscellaneous:	
Bound.....	152
Unbound.....	2,487
Total:	
Bound.....	4,652
Unbound.....	159,721
Grand total on shelves, bound and unbound.....	224,687
Cards written during year.....	1,067
Library catalogue cards completed.....	2,066
Documents loaned.....	4,305
Readers.....	1,103
Exchanges.....	1,132
Accessioned:	
Number of pamphlets bound.....	1
Transferred to other divisions.....	114

## DIVISION OF ARCHIVES, COPYRIGHTS, ETC.

In all, there are 1,530 papers arranged and classified pertaining to the judicial branch, forming a list of 944 papers concerning the four courts of first instance of this capital; 1,388 papers with their corresponding alphabetical cards have been arranged and classified, of the following branches: Customs, postscripts, contributions and imposts, denunciations, and property, making 174 bundles altogether; there have been registered in one register book 700 cases referring to temporalities, pious establishments, and patronages, making 22 bundles in all. There have been registered in a chronological index 570 royal cédulas and royal orders for the year 1783 and 1787; 600 notarial registers of Manila and of the provinces, and 133 papers relative to radication of foreigners, and 182 statements about lands have been registered; 4 contracts relative to public works have been registered and filed; 2 contracts of loan made to the Manila Railroad Co.; and 1 contract relative to lease of land in Bagulo, Benguet.

*Large Cattle Brands.*

Nineteen thousand cattle brands have been received during the year, 3,693 of which have been returned for proper issuance in accordance with the law, and 1,920 brands receipted.

*Protocols.*

There have been received in the division 495 notarial registers, with 810 pieces of notarial documents; 477 copies of said protocols were issued to interested parties, with 1,188 pages and 330,310 words.

By virtue of section 1702 of the Administrative Code, charges per page, instead of per word, were made for copies furnished. Through this new method of charges, it is expected more fees will be collected in the future.

Fifty-nine official copies were also issued to various Government offices, with 365 pages and 39,270 words, without charges, by virtue of Act No. 644.

*Patents, Copyrights, and Trade-marks.*

There have been registered and filed with the corresponding property certificates, trade-marks, patents, and transfers as shown by the following, to wit:

For file of 66 United States patents.....	132
For file of 44 transfers of patent.....	28
For 3 certified copies of patents.....	6
For register of 222 trade-marks and industrial names.....	11,100
For transfer of 20 industrial marks.....	40
For 59 certified copies of certificates of register of trade-marks and industrial names.....	116
Total.....	11,422

*Corporations.*

There have been registered and filed articles of incorporation, by-laws, certificates of amendments, and increase of capital.

# 144 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

## *Summary of collections made by the division.*

Protocols .....	₱1, 294. 80
Patents and trade-marks .....	11, 422. 00
Corporations .....	13, 984. 00
Total .....	26, 701. 00

## *Comparison.*

Collected during the year 1916 .....	13, 797. 40
Collected in excess during the present year 1917 .....	12, 903. 60

This increase of ₱12,903.60 is due to the great number of industrial and agricultural corporations, of these there were 43 Japanese corporations established in the department of Mindanao and Sulu, with capital stock amounting to ₱2,612,000, and which have paid to this division the total fees of ₱1,516.

The increase is due also to the increased number of trade-marks registered during the year, which shows that the agricultural and industrial development of the islands is increasing very rapidly.

## DIVISION OF MUSEUM.

As the ethnographical section is the only part of the new Philippine museum, which is as yet definitely organized and in actual operation, the present report relates primarily to that section.

### *Ethnographical section.*

This part of the museum was definitely transferred as a going institution to the Philippine Library and Museum on September 1, 1917. As a sum of only ₱2,000 was available for the expenses of the museum during the last four months of 1917 little progress was possible. With the new appropriation act for 1918, however, it is hoped that the museum can soon be put into shape for opening to the public and that considerable progress and expansion will be possible during the current year.

### *Character and extent of the collection.*

There are now in the museum 10,267 ethnographical specimens which have been catalogued and classified and approximately 2,000 specimens which are as yet uncatalogued. A conservative estimate of the value of these collections would be ₱100,000, exclusive of the building, cases, furniture, and other museum property. These specimens have been gathered from widely scattered regions throughout the islands, the largest and most definitive collections being from the following ethnographic groups:

*Christian.*—Tagalog, Panayan and Bohol Bisaya, Iloko, Pampagian and Pafisinan. (Small collections from the Bikol, Ibanag, Ivatán, Isinai, and Dumagat groups.)

*Mohammedan.*—Sulu, Magindanao, Lanao, and Yakan.

*Pagan.*—Ifugao, Igorot, Bontok, Kalinga, Apayao, Tinggian, of Luzon; and Manobo, Mandaya, Isamal, Bagobo, Bilaan, Tagakaolo, Subanon, and Tirurai, of Mindanao. (Small collections from the Ilongot, Negritos, Mañigyan, Bukidnon, Atá, Mañiggañgan, and Kulaman groups.)

There are no collections, or only very weak ones in proportion to their importance, from the following groups: Bikol, Cebuan Bisaya, Samar-Leyte Bisaya, Ibanag, Sambal, Gaddaño, Kuyonon, Kalamian (Christian); Samal, Bajao (Mohammedan); Bukidnon. Tagbanua, Ilongot, pagan peoples of Negros and Panay, Negritos, etc. (Pagan).

In addition to the ethnographic collections just listed the museum contains a valuable collection of historical material, and also a small archaeological collection loaned by the department of anthropology of the University of the Philippines.

Classified by the subject the museum collections are strongest in textiles and weaving apparatus, clothing, primitive jewelry, weapons, pottery, and baskets; while they are weakest in models illustrating various industries, transportation, racial types, costumes, industrial and fine arts, etc., together with photographs, charts and maps, antique jewelry, native art, archaeological material, etc. There is room for considerable improvement along the lines last mentioned.

*Source of collection.*

The Juan Alvarez Guerra collection and the Saleeby Moro collection are the two most valuable single collections in the museum. Many specimens from both were sold, lost, or destroyed at the St. Louis Exposition, but those that remain are of much interest and value. The Guerra collection contains many old objects, dating back to the eighteenth century and earlier, and was made in Spanish days. The Saleeby collection is a very fine Moro collection, and it would be quite impossible to duplicate it at the present time.

On the whole, the specimens in this museum constitute one of the largest collections of the Philippine ethnographic material in the world. Other large collections are those in the Field Museum, of Chicago, and the Royal Ethnographic Museum, of Dresden, the latter especially containing many rare and old specimens which are not in our museum and which it would doubtless be impossible to secure at present. Some 20 other museums contain considerable Philippine material, but their collections are not nearly so extensive as those above mentioned.

*Work during 1917.*

Due to the lengthy negotiations for transfer of the museum from the Bureau of Science to the Philippine Library and Museum, and later due to lack of funds, not as much progress was made during 1917 as it was planned. Nevertheless the mounting of specimens in the exhibition cases, which had only been begun in the last months of 1916, was carried forward with energy, and only the lack of glass and partitions for 10 of the show cases prevented this work from being completed. Many specimens were also mounted on the walls, and the whole series of duplicate specimens were classified and filed away in storage cases. Much work was also done toward correcting and checking up the card catalogue, and a complete inventory will soon be ready. Lack of filing cards prevented our doing much work on the 2,000 uncatalogued specimens. The whole museum building was thoroughly cleaned and renovated, and is now in excellent condition, with the exception of certain drains, which must be repaired before the next rainy season commences.

## FILIPINIANA DIVISION.

The activities of the division is shown in the following table:

*Number of books read during the year.*

	1915	1916	1917		1915	1916	1917
English books.....	2,987	3,961	6,357	Other Philippines.....	25	22	55
Spanish books.....	5,935	7,511	7,244	All others.....	12	20	21
Tagalog books.....	894	1,427	1,764				
Visayan books.....	35	18	29	Total.....	9,892	12,859	15,470

Glancing at the above table one may readily see the increased number of English readers, which has nearly doubled those in 1916, while the figures representing the Spanish readers for the same year is somewhat less, thus showing a decrease in the use of the latter and an increase in the use of the former during the year 1917.

The statement below shows the classification of books and other publications read either in or outside of this division:

General works.....	1,930
Philosophy.....	23
Religion.....	93
Sociology.....	7,715
Philology.....	140
Natural science.....	164
Useful arts.....	110
Fine arts.....	28
Literature.....	2,916
History.....	2,351
Total.....	15,470



As may be seen from the above statement great interest is being shown by the readers of this division in matters pertaining to sociology, history, and general literature. The greater number of the daily readers of this division are young men and women.

The total number of books purchased and donated for this division during the year 1917 is 267.

## CIRCULATING DIVISION.

(American Circulating Library formerly.)

The year has shown a steady growth in circulation, in spite of the fact that a large number of regular readers have left the country. This means that their place has been taken by Filipinos, with whom the reading of books is growing to be a habit. The Filipinos have felt the educational value of extensive reading and the teachers of the public schools have been particularly active during the past year in urging the students to make use of the library in their studies. This clearly demonstrates that the purpose of the Government in providing books for the people free of charge is meeting with appreciation, as each year shows a decided increase in the number of books used. After all, a library is a mere collection of books, well or ill selected, and the response of the people to its call is the only thing justifying its continued existence.

The past year shows an increase of circulation of 11,111 over 1916 in this division alone, without any increase in personnel.

*Table showing total circulation, circulating division, for the years 1911 to 1917.*

Fiscal year, July to July:	
1911-12.....	24,609
1912-13.....	35,555
Whole year; free card system introduced:	
1914.....	78,818
1915.....	112,621
1916.....	128,010
1917.....	139,121

NOTE.—There has been no increase of personnel in the circulating division, though the growth of its work is shown by this table. The 1917 increase of books circulated over 1916 is shown to be 11,111.

*General summary of circulating division, 1916-17 contrasted.*

	1916	1917		1916	1917
By cards .....	113,046	117,915	Books issued to reading room.....	1,034	839
Branch and deposit systems...	11,516	18,396	Books mailed.....	263	265
Books issued on memorandum receipts.....	1,653	1,706	Total.....	127,512	139,121

NOTE.—This shows an increase of circulation for 1917, of 11,111 over 1916.

*Reference and periodical section.*

Reference books sent to Iloilo Branch Library.....	78
Reference books sent to Cebu Branch Library.....	55
Reference books on hand.....	2,771
Total.....	2,904
Bound magazines on hand, volumes.....	3,218
Periodicals received:	
Subscription .....	12,301
Gifts .....	12,106
Total.....	24,407
Readers in the reading room.....	102,338
Readers using the periodicals.....	87,484
Readers using the reference books.....	29,815

Readers of books from circulating division.....	770
Old periodicals consulted and borrowed by readers.....	9,940
Books mutilated.....	4
Magazines mutilated.....	19
Magazines purloined.....	2
Books purloined.....	1
Periodicals prepared for binding.....	300

## CATALOGUE DIVISION.

*Printed catalogue.*—A classified printed catalogue of all the books of the library is being prepared by the division for publication. The catalogue when published will serve the purposes of exchange with publications of foreign libraries and such other institutions as would care to make exchanges of publications with this library, and public conveniences. The circulating list is now well underway, as well as the list of the legislative reference division.

*Reference work.*—Reference and bibliographical work has, from time to time, kept the division busy. Members of the Fortnightly Club, students from the University of the Philippines, public and private schools, and officials of the Government were furnished information on several topics in which they were interested.

*Union catalogue.*—Copies of the instructions for writing cards for the union catalogue were sent out again to the different bureaus and offices requesting them to send, as soon as possible, the index cards of all books in their possession. As a result of this second notice, several bureaus and offices have sent in the required index cards.

## ILOILO BRANCH LIBRARY.

The work of the branch during the year has been progressive in every line of its activities. The growth of book circulation, together with the number of readers who frequented the reading rooms, show a substantial increase.

The maintenance of the branch during the year has been most satisfactory because of the cooperation and support extended by the authorities of Iloilo.

*Circulation of books.*—The receipt of more books from Manila, together with the donations during the year, have added to the stock of books circulated during the year 1916. It has been regrettable that demands for reading material could not in many instances be supplied owing to lack of material. The registration during 1917, as compared with that of 1916, shows a gain of 447 active subscribers. The use of books by classes is as follows:

Month.	Circulation.			Books issued in reading room.		
	Fiction.	All others.	Total.	Fiction	All others.	Total.
January.....	556	347	903	205	219	424
February.....	520	190	700	235	126	461
March.....	545	285	830	306	214	522
April.....	523	343	866	319	292	611
May.....	577	365	942	304	180	483
June.....	727	416	1,143	336	204	540
July.....	616	482	1,098	211	139	350
August.....	694	611	1,305	248	147	395
September.....	663	669	1,332	236	175	411
October.....	672	599	1,271	193	153	346
November.....	650	806	1,456	157	231	388
December.....	680	810	1,490	175	115	290
Total.....	7,423	5,913	13,336	2,927	2,204	5,131

*Donations.*—Aside from a number of newspapers received regularly, the donations of the year have shown a decided increase in the growth of the branch. The interest and enthusiasm shown by the people of Iloilo and elsewhere are well indicated by the continuous flow of gifts.

The branch has been furnished by the chartered bank with magazines and newspapers about the European war. Mr. Selblinger also gave his magazines and newspapers. Three special collections were received—from Mr. Soler,

# 148 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

Popular Mechanics for 1915 and 1916; complete collection of the Independent, by Sotto; and Free Press for 1916, from Mr. E. Jalandoni.

Mr. Iguara has given to the library a framed portrait of Dr. Rizal, which has been placed in the most conspicuous place.

Mr. Phelan surrendered also two frames containing his picture and two old photographs of the Iloilo Fort taken during the Spanish régime.

## *Statistical report of the business done by the Iloilo branch library for the year 1917.*

Days the library was open.....	363
Books added to the library by gift.....	601
Newspapers and magazines presented.....	966

### CARDS.

Application cards distributed.....	1, 217
Application cards approved.....	468
Readers and visitors in the reading room.....	11, 239

### BOOK SERVICE.

Books circulated (including all classes and fiction).....	13, 336
Books read in reading room.....	5, 131

Total of book service in the year..... 18, 467

Respectfully submitted.

VICTORINO MAPA,  
*Secretary of Justice.*

The GOVERNOR GENERAL,  
*Manila.*

# REPORT OF THE SECRETARY OF AGRICULTURE AND NATURAL RESOURCES.

JANUARY 1 TO DECEMBER 31, 1917.

DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES,  
*Manila, March 15, 1918.*

SIR: I have the honor to submit herewith the annual report to the Department of agriculture and natural resources for the year ending December 31, 1917.

Pursuant to the provisions of Act No. 2666, the organization of this department took effect January 15, 1917, Dr. Galicano Apacible having been appointed secretary and Mr. Rafael Corpus undersecretary.

The department is composed of the following organization units of the government: Bureau of agriculture, bureau of forestry, bureau of lands, bureau of science, and weather bureau. The department is also in charge of matters pertaining to agricultural colonies, hunting, and fishing. To properly carry out the work on the agricultural colonies, this department has appointed the director of agriculture as delegate of the secretary of agriculture and natural resources in all matters pertaining to Momungan Agricultural Colony; Gov. Frank W. Carpenter, of the department of Mindanao and Sulu, as delegate in all matters pertaining to Cotabato Colonies; and the director of lands in all matters pertaining to Bohol and Cagayan Colonies. The appointments were made on April 11, 1917.

During the year the activities of the department have increased by the creation of the food commission by Executive Orders Nos. 50 and 59, series of 1917, and the inauguration of the food-production campaign by Act No. 2723, in force since November 28, 1917.

## BUREAU OF AGRICULTURE.

The most important activities undertaken by the bureau of agriculture during the year 1917 were, "(1) the vigorous food-production campaign, under the direction and supervision of the department of agriculture and natural resources, for the growing of food products to meet any possible shortage of foodstuffs due to the world war; (2) the remarkable progress made in the establishment of cooperative rural-credit societies among the small farmers of the islands; and (3) the complete elimination of the locust plague since the last quarter of the past year."

## PHILIPPINE AGRICULTURE.

It is gratifying to state that the agricultural situation of the Philippine Islands for the year 1917 was an exceptionally good one, surpassing any one of the five previous years in the production of nearly all staple crops.

During the year only one typhoon of importance visited the islands, passing through the northern part of Luzon and Babuyan group. Slight storms occurred in northern Mindoro, northern Samar, northern Sorsogon, Balingan Channel, and a few other localities, but only little damage to crops resulted. Heavy rains fell during the year in nearly all parts of the islands, causing rather considerable damage to sugar cane, tobacco, and corn, and, to some extent, the rice in some towns, although such damage by rains and floods was not so great as in previous years.

Economically speaking, this agricultural year resulted in an increased prosperity to the farmers as a whole, because of the prevailing increase in prices.

The total value of the nine staple products for the agricultural year 1916-17 amounted to ₱234,000,000, as against ₱181,700,000 for the preceding year, the remarkable increase being due in some extent to the increased production, although in a greater degree to the increase in prices in the local markets.

#### CROP CONDITIONS.

*Rice.*—During the year there were harvested, in round numbers, 1,939,000,000 liters of rough rice, worth ₱72,500,000, representing an increase of more than 23 per cent over last year's production and nearly 30 per cent over the value of the crop of the previous year.

*Abaca.*—During the year 1917 the total production of abaca amounted to 155,790,000 kilos, which, even though it is only 1 per cent in production over the previous year, yet shows a total value of ₱60,722,000, which is an increase of nearly 43 per cent over the value of the previous crop.

*Coconuts.*—The total value of this crop amounted to ₱32,860,000, or ₱8,430,000 more than was paid for the previous crop, the yield being 887,000,000 nuts and 42,600,000 liters of tuba. Of the total number of nuts, 63,360,000 were used for food, and the remainder were used for copra and coconut oil. Compared with the previous year, there is an increase of 31 per cent in copra and 3 per cent in oil.

*Sugar.*—The production of sugar was 365,000,000 kilos of crude sugar and panochas, worth ₱32,850,000, which shows a decrease of 2 per cent as compared with the crop of 1915-16.

*Corn.*—This crop also registers a decrease of nearly 5 per cent in production compared with that of last year, but the crop is worth approximately 20 per cent more than that of last year, the total value being ₱77,640,000.

*Tobacco.*—The total tobacco production was 47,000,000 kilos, worth ₱11,637,000, which is an increase of 14 per cent in production and a gain of ₱4,378,000 in value over the crop of the previous year.

*Maguey.*—The production of maguey this year was 23,629,000 kilos, valued at ₱4,962,000, an increase of 76 per cent in production over the previous year and of 184 per cent in the value, a creditable showing, indeed, and one which shows the possibilities and growing importance of this valuable product.

*Cacao and coffee.*—These products show an increased production for the year. The yield of cacao was approximately 600,000 kilos and of coffee 800,000 kilos, with a value of ₱382,000 for cacao and ₱397,000 for coffee.

#### PERSONNEL OF THE BUREAU OF AGRICULTURE.

There were no changes in the directorate of the bureau of agriculture during the year 1917. There has been a reduction of 18 employees in the American personnel through resignation, of which 7 were classified and 11 temporary, and an increase of 71 employees in the Filipino personnel, of which 60 were classified and 11 temporary.

#### ORGANIZATION.

The bureau of agriculture was reorganized on August 1, 1916, in accordance with the plan suggested by the efficiency committee and, except the creation of a new records section, no changes have been made.

#### ADMINISTRATIVE DIVISION.

Under the immediate supervision of the directorate this division performs the routine office business of the bureau of agriculture at the central office. The steadily growing interest on the part of the people in the work of the bureau is marked by an increase of 108 per cent in the correspondence handled over that of the preceding year.

#### ANIMAL HUSBANDRY DIVISION.

The demand for improved live stock, particularly cattle, swine, and poultry, is largely increasing each year. The people are realizing more the importance of raising improved live stock that the sources of the bureau of agriculture have been severely taxed to meet the demands coming from every part of the islands. About the middle of last year the food-production campaign

organized by the bureau of agriculture under the direction of the food commission first, and the direct control and supervision of the department of agriculture and natural resources after, in 1914, was decidedly encouraged and brought to a more extensive advancement that the sale of Government animals had been practically suspended owing to the plan of establishing more stations for public breedings. At the close of the year the bureau was maintaining the following animals for breeding purposes distributed at 58 different places in 29 Provinces: 39 horses, 637 cattle, 42 carabaos, 290 swine, 86 goats, 40 sheep, and 14 mules. During the year 54 cattle, 3 carabaos, 174 swine, 16 goats, 3 sheep, and 400 poultry were sold to the public from the Government stock farms, bringing in a total revenue of ₱9,872.50.

#### VETERINARY DIVISION.

##### RINDERPEST.

The ravages of rinderpest continued with a steady virulence, and the year saw an increase in the recorded number of cases and deaths. The number of cases was 33,971 and that of deaths 26,951, as against the 23,808 cases and 18,251 deaths, respectively, reported last year. The eradication of rinderpest, in fact, is a difficult problem for the Government to solve, due to the lack of a known cure of infected animals. Immunization properly applied is the surest method of preventing the animals from contracting the disease, but the insufficient number of trained men caused the bureau to greatly delay the extension of the immunizing campaign. Owing to the severity of the rinderpest outbreaks it was necessary to keep the majority of the veterinary force on quarantine work, and even then it was not possible to supply more than about half the number of veterinarians demanded by the various Provinces and municipalities.

Most of the immunizing operations during the year were carried on in the stations of Pampanga, and the total number of carabaos and cattle immunized during the year was 4,648 head, with a mortality from all causes inside the stations of 187, or 4 per cent. At Iloilo the total number immunized was 1,280, the mortality from all causes being 51, or a little less than 4 per cent. The total number of animals immunized at different stations during the year was 7,191, and the total number of deaths occurring from all causes was 374, or 8.8 per cent of the number treated at the stations.

##### LIVE-STOCK IMPORTATION.

The year witnessed a further decline in the importation of live animals from foreign ports, due rather to the scarcity of tonnage and excessive freight rates than to any lack of demand in the local markets. The shortage of imported animals for slaughter and of the importation of chilled and frozen meat as well account for the marked increase, noted elsewhere, of native cattle and swine shipped to Manila for consumption.

During 1917, of the 4,618 cattle arriving at Manila from foreign ports, 3,812 were from Pnom-Penh, 497 from Singapore, 195 from Hongkong, 100 from Saigon, 11 from Australia, and 3 from Spain. Also arrived at Manila during the same period 185 carabaos from Pnom-Penh, 57 from Singapore, and 71 from Saigon.

#### PLANT INDUSTRY DIVISION.

Investigation work has been carried out by this division. Work for testing the productiveness of the most important crops of the islands, as well as the adaptability of introduced plants, has been continued this year with encouraging results. The introduction of foreign plants and the use of selected seed are becoming more and more extensive and popular among the farmers of the country. This is shown by the fact that this year the bureau has been practically swamped with requests for seed and plant material.

The rice work embraces two distinct phases: That of testing the adaptability, cultural requirements, and productivity of many varieties, and the production of seed of high yielding strains for distribution. During 1917, 165 different varieties of rice were tested and valuable data for future work obtained. In addition to this, 650 cavans of seed of high yielding varieties was produced for distribution and future planting. It is upon the results obtained through ex-

perimental work such as that outlined above that the present seed-selection campaign is based.

The work in corn was carried on at the La Carlota station. This work consists of observation of the behavior and yield of several varieties and the production of improved seed for distribution.

The sugar work for the past year has been done along lines of special investigations, research, and experiments; the results thereby obtained have been used in conducting demonstration work among the plantations in both field and factory. This resulted in improving the yield as well as the quality of the sugar. There have been distributed during the year 83,000 points of improved varieties of cane.

The work with tobacco has been mainly on seed production and distribution. Test for acclimatization of foreign varieties has also been carried on, and this experiment was not at all promising and until the seed is fully acclimatized no definite result can be told.

There were distributed for the past year from Lanao station 6,676 tropical fruit trees of various species, 41,005 coffee seedlings, 350 pineapple slips, 1,959 ornamental plants, 108,447 various plants and cuttings, and 1,762.89 kilos of seed of various species, and 688,709 various kinds of economic plants, cuttings, bulbs, and suckers, and 9,236 ornamental plants and cuttings, etc., were distributed from Singalong station.

Seventy-seven thousand five hundred and twenty seven kilos of seeds have been sold and distributed free of charge. A large part of these seeds was raised by the bureau.

#### DEMONSTRATION DIVISION.

As a result of the educational campaign for which the bureau has been struggling heretofore through the personnel of this division, the average farmers of the islands are now showing great interest in adopting the Government instructions, thus improving their methods of farming and bettering the quality of their crop as well as increasing the amount of their production without increasing their expenses.

The use of selected seeds is being generalized day by day, although in some cases it did not extend beyond the limits of experimental tests. General enthusiasm is being noted throughout the archipelago for demands of improved and selected seed which have proven successful.

The last year campaign has been marked by greatly extended activities in the establishment of provincial and municipal nurseries, the food-production campaign, rice-seed selection, and tobacco campaigns. Inspectors were assigned in almost every Province to help the local officials carry on effectively the food-production campaign, give important information concerning agricultural improvements, distribute seeds and plants, make actual demonstrations of better agricultural methods and modern implements in different stations, and supervise the placing and maintaining of breeding animals for public use.

The number of vegetable gardens has greatly increased, and provincial and municipal grounds were cultivated for producing vegetable seeds for distribution and for demonstrating the proper method of growing vegetables.

The rice improvement campaign has been greatly emphasized for the introduction of the bureau improved seeds and the selection of local varieties for seed purposes, paying more attention to the latter, which resulted in a success especially in Provinces where farmers were able to cooperate heartily with the inspectors in the seed selection.

#### FIBER DIVISION.

The most important work performed by this division during the year was the enforcement of the fiber grading and inspection law, and also investigation and experiment on abaca (Manila hemp), agave and allied fibers, kapoc, cotton, and miscellaneous tropical fibers of commercial possibilities.

The system of grading and inspection during the year was conducted in a satisfactory manner due to a more thorough acquaintance of the grading establishments with the official standard of grading and the prescribed regulations governing the baling of fibers. During the past year there were designated 34 grading stations and 101 grading establishments, an increase of four stations over the previous year.

The year 1917 has been a very favorable year for the fiber industries, in so far as weather conditions are concerned. No typhoons nor floods of any serious

character have visited the fiber provinces, and the abaca plantations in the Southern Luzon provinces are reported to have fully recovered from the effects of 1915 typhoons. The most notable changes in the fiber industry during the year 1916 deserving special mention are the great increase of the good and excellently cleaned grades of abaca, the highest market price ever recorded in the history of the islands, and the introduction of Prieto maguey-extracting machines which is expected to revolutionize the maguey industry.

During the year there have been inspected, stamped, and approved 1,291,851 bales of abaca and 113,579 bales of maguey and sisal, and also 1,553 bales of pacol and canton. A total of 1,406,983 bales of fibers was produced during the year 1917, or an increase of 101,831 bales over that of the previous year.

The collections made by the fiber division for 1917 amounted to a total of ₱163,171. This division is not only self-supporting but also is the source of considerable revenue to the Government.

#### OFFICE OF PEST CONTROL.

It is with pleasure that it can be announced that the islands are now free from the grip of locust plague. During the present year there has been no damage to agricultural crops by this pest. On July 28, 1917, the archipelago was declared free of locusts, and, except for three straggling bands that have been destroyed upon their appearance, the islands have been free ever since. Since September 22, 1917, no known locust swarms existed in the archipelago. Acknowledgment is made of the earnest cooperation of the provincial and municipal officials as well as the constabulary forces who heartily aided in the suppression of the plague.

The work of coconut inspection has yielded most positive results which are very far-reaching and which conclusively show the deplorable condition of the coconut industry of the islands. During the year there have been inspected 8,661,380 trees.

A great amount of work has been done in the control of pests affecting tobacco, abaca, rice, sugar cane, and citrus, and so far no definite results have been obtained. Also there has been carried out a considerable amount of work in the control of rat plagues with satisfactory results.

The plant inspection service has been kept throughout the year, and a new plant inspection office was opened at Zamboanga, there having been issued under the provisions of Act No. 2515 certificates covering the inspection of 3,948 packages of seed and plant material.

#### OFFICE OF THE RURAL CREDIT ASSOCIATIONS.

As previously stated, the remarkable growth and activity of rural credit associations throughout the Provinces has exceeded the expectations of its most optimistic supporters, and has proven one of the most gratifying and far-reaching achievements of the bureau during the past year. The movement was at its infancy during the closing days of 1916, but eight rural credit associations having been formed up to January 1, 1917. On January 1, 1918, there were 84 regularly organized associations with a combined capital stock of ₱408,880, of which ₱41,483 had actually been paid at the time of the incorporation, which sum has been greatly increased, a conservative estimate placing the paid-up capital of these associations at close to the ₱100,000 mark at the close of 1917. In addition to the associations already incorporated, 142 other associations were organized during the year, the capital of which has not been entirely paid in, thus for the present delaying their incorporation. The year's results are encouraging. It is sure to grow if carefully managed, because rural credit meets an urgent and pressing need.

#### OFFICE OF PUBLICATIONS.

The publications now issued by the bureau of agriculture include the Philippine Agricultural Review, a quarterly publication in English; the Philippine Farmer, a monthly farm publication in English and Spanish; and miscellaneous bulletins, pamphlets, and circulars. During the year 27,968 miscellaneous publications were distributed, and 944 books and pamphlets were added to the bureau library.



## OFFICE OF ANIMAL INSURANCE SECTION.

The sway of rinderpest prevented the enforcement of Act No. 2573 as amended, providing for the insurance of work animals. However, it is hoped that for the coming year the insuring of animals will be started unless there prevail disease in every Province that will make it practically impossible to bring about this beneficial and much-needed help to the farm people.

## FOOD COMMISSION.

## ORGANIZATION.

Your committee appointed by Executive Order No. 50, series of 1917, to consider the question of Philippine food supply, of which the secretary of agriculture and natural resources was the chairman, and which has already rendered its report, was on July 18, 1917, succeeded by the present food commission, created by Executive Order No. 59, consisting of the secretary of agriculture and natural resources, the director of education, the director of the bureau of science, the director of health, the purchasing agent, and the director of agriculture. Mr. Silverio Apostol, of the bureau of agriculture, was chosen secretary of the commission on July 23, 1917.

## MEETINGS.

The food commission met regularly every Monday except two Mondays and held one extraordinary meeting during the period of from July 23 to December 2, 1917, inclusive. At the first meeting, however, held after the enactment of the food-production law (Act No. 2723), it was decided that the commission meet on the first and third Mondays of each month instead of once a week. No regular meetings were held during the remaining part of the year, however, except one extraordinary session on the 10th of December.

## PROGRESS OF THE WORK.

The making of a food-production census, recommended by the old committee with a view to ascertaining the extent to which food production could be increased, was immediately ordered, but unfortunately the local officials have not been prompt in responding to the call, and the census is still incomplete.

Your commission is conscious of the fact that the only positive way of increasing food production is to have more edible crops planted and more chickens and hogs kept and raised. To do this, however, the farming elements and the mass in general must be appealed to, and the provincial and municipal officials, the press, the churches, and those Government organizations having a large number of employees in the Provinces, in addition, of course, to the bureau of agriculture, have been especially requested to cooperate with the commission in this great task. Consequently timely editorials and press notes, besides special articles prepared by the commission, have been published by the various dailies and periodicals; fitting sermons preached from pulpits, mass meetings held, public lectures on agricultural topics delivered, instructive leaflets distributed, and food-campaign posters posted in public buildings and conspicuous places all over the country. For a more direct and systematic prosecution of the campaign provincial and municipal food committees have been appointed and civic clubs organized throughout the archipelago in accordance with food commission circular No. 1.

In a number of Provinces assemblies of municipal presidents were called by the provincial governors, in which problems of food production, including the organization of local food committees and civic clubs, were discussed. Whenever possible the director of agriculture was delegated to represent the food commission in the said assemblies. At the assembly of municipal presidents of Zambales the commission has been represented by its secretary. The under-secretary of agriculture and natural resources also made energetic appeals to the provincial and municipal officials of Tarlac, Pangasinan, La Union, Ilocos Norte, and Ilocos Sur for greater production on the occasion of his inspection trip in these Provinces in September.

As a direct result of all these activities home gardens were not only planted by homekeepers, but in some instances flowers have been actually uprooted and replaced with vegetables and other food-producing plants in the provincial

and municipal gardens, and the local Government officials were conspicuous among those actively engaged in home gardening. Vegetable gardens are kept by constabulary and municipal forces, by prisoners, and especially by school children. Never before have the school children produced so much foodstuffs. Seed selection and the planting of more rice, corn, mongo, bananas, papayas, camote (sweet potato), and other field crops have, of course, been likewise energetically encouraged. The technical and field forces of the bureau of agriculture have been utilized to the limit by the food commission. The raising of chickens and hogs is made a part of the civic clubs' program.

#### SEED DISTRIBUTION.

With this country-wide movement for increased food production it was necessary last August to obtain additional funds from the emergency board for the bureau of agriculture to meet the fast-increasing demand for vegetable and other food-producing seeds. Some 18,838 kilos of seed, exclusive of rice, mongo, and potatoes, have been distributed during the last six months of 1917, as against only 7,530 kilos, in round numbers, during the first semester of the year. The total distribution for 1917, too, has almost doubled that for 1916. In fact, the amount distributed during the second semester alone of 1917 exceeded by 2,219.4 kilos the total distribution of seeds for 1916.

#### FUNDS AND EXPENDITURES.

According to a statement furnished by the insular auditor, of the ₱3,000 allotted by the Governor General, to the food commission to defray the expenses for office supplies, postage stamps, and printing, the sum of ₱1,973.50 has been expended, as follows:

Postage stamps.....	₱300. 00
Printing circulars and forms.....	296. 40
Stationery and other office supplies.....	1, 377. 10
Total.....	1, 973. 50
Balance left in the treasury.....	1, 028. 50

#### ACT NO. 2723, FOR INCREASING THE AGRICULTURAL PRODUCTION OF FOODSTUFFS.

Considering it to be one of the best means to carry out the provisions of Act No. 2723 relative to the increased food production, this Department has established stations in the Provinces wherein seeds were selected. At the commencement of this work the Department furnished laborers and foremen, but later on farmers took over the work of selection, the Department furnishing only the foremen to supervise the work. So far it is estimated that the amount of ₱60,000 will be expended, but the amount of good accomplished would be, in the opinion of the undersigned, more than enough to repay this expenditure. It is expected that farmers will entirely take over the work in the future, in view of the enthusiasm throughout the Provinces wherein said stations are established.

#### MONGO AND CORN.

Because of its high protein content, a campaign for the increased production of these cereals has been started, and it is expected that they will furnish the element of food so much lacking in the daily diet of the common people. Special emphasis is also being laid on the importance of corn in the hemp, tobacco, and sugar Provinces, as it is thought that it is in these Provinces that corn as a substitute of rice has the greatest possibilities.

#### CORN DEMONSTRATION.

As a necessary supplement to the campaign an allotment of ₱1,000 has been given to each of the following Provinces, to be expended for corn demonstration under the direction of the division superintendents of schools: Albay, Batangas, Cagayan, Ilocos Norte, Ilocos Sur, Isabela, La Union, Leyte, Misamis, Nueva Vizcaya, Occidental Negros, Samar, and Sorsogon.

In this allotment no restriction was placed by this Department except that no particular recipe requiring ingredients beyond reach of common people

should be used. The idea is to popularize the use of corn in every Filipino home.

#### IRISH POTATO.

Distribution of seeds for the increased production of Irish potatoes has been started, mainly in the Provinces of Benguet, Batangas, and Tayabas; in the latter two Provinces success has already been attained. Among these Provinces the Province of Benguet has received the greatest quantity of seed because of the adaptability of its soil for the production of potatoes.

#### CHICKEN RAISING.

In order to induce the people to raise chickens, an allotment of ₱500 to each one of the agricultural schools scattered all over the islands has been made for the purpose of investing same in the purchase of hens and cocks of Cantonese breed for breeding purposes.

#### POULTRY-SWINE STATIONS.

Under the immediate supervision of the animal-husbandry division of the bureau of agriculture, a campaign for the increased production of poultry and hogs has been carried on, and poultry stations will be established in the following Provinces shortly: Ilocos Norte, Nueva Vizcaya, Pampanga, Batangas (Bailan), Tarlac, Rizal, Ilocos Sur, Iloilo (Dingle), Cavite, Pangasinan (San Carlos), Albay, Zambales, Cebu, Bohol, Leyte, and Cagayan.

#### AID TO HOMESTEADERS.

This department has selected the Central Luzon Agricultural School of Muñoz, Nueva Ecija, to be used as a medium through which cooperation may be given to homesteaders around the school. In view of the influence that former and present pupils of said school is exercising over the people of Muñoz, scientific ideas of cultivation may be thus transmitted to said farmers by means of the knowledge gained by graduates of the school. With this end in view, the sum of ₱10,000 has been set aside to be placed at the disposal of the committee, consisting of the superintendent of the Central Luzon Agricultural School, the provincial treasurer of Nueva Ecija, and Mr. Nicolas Ruiz, of Muñoz, to be loaned to homesteaders in sums not exceeding ₱400 per homesteader. This sum shall be devoted to the purchase of work animals, implements, materials, and supplies, and, with the personal supervision of the committee, no loss is anticipated.

#### BOHOL FILIPINO RICE COLONY.

As in 1916, there is no change in the organization. The superintendent, Mr. Calcata, has been performing also the duties of cashier.

There are at present 88 colonists versus the 78 of last year. Their accounts amount to ₱13,969.40. There are now seven colonists who have freed themselves from their financial condition to the Government.

The information received from the superintendent of this colony shows that the crops for the year are satisfactory. As in the case of the Cagayan Filipino rice colony, the report of harvest has not yet reached this office.

The net loss on this colony during 1917 is only ₱466.42.

It is believed that for the years to come this colony will be placed upon a solid and substantial basis.

#### CAGAYAN FILIPINO RICE COLONY.

Mr. Leon Edrozo, a graduate of the College of Agriculture, who has qualified in the civil-service scientific assistant examination, has been appointed, April 16, 1917, as superintendent and cashier of the colony.

The number of colonists in this colony has greatly increased. There are at present 108. Their current accounts amount to ₱41,280.33, or an average of ₱158.74 per colonist.

Great acreage for the planting of rice and other food supplies has been prepared, and the prospect is that there will be better rice crop than what the colony has had for the past years. Some of the colonists have started raising hogs and poultry.

The net loss in this colony during the year is ₱2,307.86.

The worst has passed and while the immediate future is not as bright as it may be it is believed that this colony is beginning an era in its history which, with the financial aid of the Government, will be one of decided material development.

#### MOMUNGAN AGRICULTURAL COLONY.

As may be readily seen therefrom, the colony is operated at a loss. At the beginning of the year 1917 the colony's cash account showed a deficit of ₱455.61. Insular aid in the sum of ₱25,000 appropriated, was received during the year, and at the close of the year the cash on hand shows only ₱19,350. The reports show that there was a loss in both the produce handled and on operation of the colony store. Produce which cost ₱3,268.33, with an added selling expense of ₱3,522, sold for only ₱4,686.12, a net loss of ₱2,104.21. Merchandise for the colony store which cost ₱22,030.85, plus a selling expense of ₱4,776.43, sold for ₱26,062.29, a loss of ₱754.99. These are the two heavy losses for the year. Other loss items are in deterioration and depreciation of supplies, produce, live stock, colony equipment, and remitted indebtedness. Loss from produce is due largely to lack of transportation facilities. Produce deteriorates easily, and if not disposed of immediately requires extra labor, thus necessitating additional expense. This produce had been sold at 43 per cent above the cost at which it was accepted by the colony agent. Loss from merchandise is due to instruction from the insular auditor, by which the colony is allowed to sell at 15 per cent only above the cost price. Besides, the colony has local competitors who buy their articles in wholesale from wholesale dealers, while the colony gets its merchandise by retail from retail dealers. In view of this fact it is being considered that the colony store be discontinued and that private concerns be allowed to sell merchandise at the colony and to buy colonists' produce, provided that the colonists will turn in a certain percentage of their crops to the Government, as stipulated in their contracts with the latter.

Of the 61 original colonists only 31 remain. Of the ₱96,044.31 advanced to colonists since the colony was started, ₱45,944.66 has been repaid, a reduction of over 47 per cent. Of the ₱28,219.22 expended to date under the designation of organization expense, nothing has been repaid, as it has been deemed expedient to postpone collections on this item until the colony reached a more prosperous stage of development.

There are at present vacant homesteads in the colony. Some of these homesteads have been taken by Filipinos and more Filipino colonists would be admitted to the colony if funds were available.

#### COTABATO AGRICULTURAL COLONIES.

During the year 1917 the colonies in this region suffered less from typhoon, flood, and locust, but, on the other hand, there have been certain destructive insects, called atafigia in Tagalo and tiafigao in Visaya, which have destroyed about 40 per cent of the rice crops, notwithstanding which, however, the harvest in general has been satisfactory.

The corn planted in the colonies along the Rio Grande fell short of expectation, on account of the early rain which continued practically throughout the year, and the occasional floods, which did considerable damage to the plants. The crop in general, however, is satisfactory. Following the policy of the Department, there has also been started work for the selection of the best seeds for the coming planting season. This method would enable the colonists to produce better grains and, it is expected, in greater quantities.

One feature to be taken into consideration in connection with these colonies is the planting of coconuts, which so far has been successful. Some of them are bearing fruits already, being only 3½ years of age.

For the area of lands cultivated and plants planted, and other products of the Cotabato colonies, attention is invited to the following tabulation:

The following statement shows the activities done in each colony the past year:

Total area cultivated.....	hectares...	2,563
Total palay planted.....	do.....	1,087
Total corn planted.....	do.....	898
Tobacco planted.....	do.....	15
Peanuts planted.....	do.....	15

Camotes planted.....	do.....	22
Mongos planted.....	do.....	9
Sugar cane planted.....	do.....	14
Ube planted.....	do.....	21
Tafigantafigan planted.....	do.....	2
Coconuts planted.....	number.....	7, 003
Kapok planted.....	do.....	6, 699
Cacao planted.....	do.....	495
Palay harvested.....	cav.....	11, 439
Corn harvested.....	do.....	6 924
Tobacco harvested.....	mano.....	1, 238
Peanuts harvested.....	cav.....	180
Camotes harvested.....	do.....	557
Mongos harvested.....	do.....	35
Sugar cane harvested.....	hectares.....	( <sup>1</sup> )
Ube harvested.....	kilos.....	27, 509
Coconut trees growing.....		13, 725
Kapok trees growing.....		257, 716
Cacao trees growing.....		676
Corn in field end of year.....	hectares.....	210
Palay not harvested.....	do.....	6
Palay destroyed by flood, etc.....	do.....	351
Corn destroyed by flood, etc.....	do.....	423
Chickens in the colony.....	number.....	23, 936
Hogs in the colony.....	do.....	2, 569
Bamboo trees, growing.....	do.....	3, 171
Blao trees planted.....	do.....	1, 490
Papaya trees planted.....	do.....	1, 300
Gabe planted.....	hectares.....	18
Bananas planted.....	number.....	167, 350
Others planted.....	hectares.....	3

At this junction I desire to recommend that funds be provided from the insular treasury for the capitalization of colonies on the basis of moving to the Cotabato rice-growing region at least 10 families from Luzon and Visayas. This recommendation, while premised primarily upon the political-social situation, is no less warranted by economic returns of not less than 100 per cent greater production of wealth per family in Mindanao than by the same individual at their present locations in the densely populated and relatively agriculturally exhausted regions of Luzon and Visayas.

The first and principal objective of the Cotabato colonies' project—the determination of whether Christian and Mohammedan Filipinos may live harmoniously in remote agricultural regions under conditions definitely promising complete eventual amalgamation—has been accomplished successfully in the opinion even of the most hostile critics who have visited and inspected the colonies during the past 18 months.

The Cotabato colonies are now entering upon their second stage—the realization of economic success and at present they are self-supporting and have been since the end of the year 1915 so far as the insular government is concerned.

In this connection, the undersigned desires to express his recognition of the work made by the provincial authorities, the administrative personnel, and the colonists themselves for their constancy in labor and self-sacrifice under previously untried and extraordinary discouraging conditions.

#### BUREAU OF FORESTRY.

The division of forest management attends to the sale of forest products and for this purpose 1,906 ordinary timber and 3,473 minor product licenses were issued besides 1,783 gratuitous licenses and 1,563 tobacco-curing house-timber licenses. The receipts for forest products were ₱536,326 or an increase of 8.6 per cent as compared with those for 1916.

The division of forest lands and maps has continued its work of inspecting parcels of land applied for under the public-land law. During the year 13,014 requests for the examination of land were received and of these 9,211 were returned with the recommendations suited to each case, 118 cases of the unlawful claim of forest land were contested in court, and 947 hectares of public land were saved for the Government.

<sup>1</sup> Not yet known.

The division of sawmills and utilizations has been busy training scalers in the work of scaling logs and grading lumber, and as a result several mills have attempted to secure the best graders.

The division of investigation as usual has had charge of the forest school for rangers, and in connection with school work has secured valuable data regarding forest resources, as well as on the growth of forest trees.

A mass of data regarding minor products has been gathered preparatory to publishing a bulletin for the information of forest product users.

Special investigations have been made of the timber supply available for miners in Bagulo, Paracale, and Aroroy. In addition, reconnaissances have been made of forests in coal-bearing regions. Mangrove swamps have been studied and the management of such areas will be inaugurated during 1918.

A long stride toward the control of the caligin evil has been made with the discovery that land covered with ipil-ipil, a small tree used for firewood, can be farmed without work animals upon a rotation basis, thus enabling persons who have no carabao to raise food without destroying valuable public forests.

In order to furnish ipil-ipil seed to all who need it and also in order to reforest certain treeless regions which are lacking not only in the timber but also in firewood, it is recommended that an appropriation be made for reforestation work. During the past year many requests for seed were refused simply because no seed could be purchased.

The fact that rangers and American foresters secure higher pay when leaving this bureau means that it is impossible to retain men after they have been trained. The five Americans who resigned during 1917 are now receiving much larger salaries and two former rangers are also earning higher pay.

Another matter which should receive careful consideration is the problem of forest protection. The public-land law specifies how public land should be taken for private use, but no penalty for illegal occupation and no satisfactory means to evict such occupants are provided. As most of the forest destruction is due to the unlawful occupation of public land, something should be done to discourage this practice.

The employment of a permanent force of guards is essential, not only to protect the forests but also to relieve the rangers of this work and leave them free for their other duties. It is estimated that 50 guards will be a valuable addition to the present force.

As it is the policy of the government to fit its employees for higher responsibilities, it is necessary that the bureau of forestry provide means to train competent rangers in their profession. The higher course in forestry has been approved, but due to lack of personnel suitable instructors are not available.

During the year shortage in shipping and increasing freight rates seriously affected the shipments of lumber to foreign markets, with a consequent reduction in the amount of lumber shipped to the United States and China markets as compared to 1916.

Timber and lumber shipped to the United States during 1917 amounted to 12,488 cubic meters (5,294,912 board feet), valued at ₱483,215, as compared to 14,880 cubic meters (6,309,120 board feet), valued at ₱659,186, during 1916.

The China market has experienced an even greater decline, as shown by the figures in the following table:

	1917			1916		
	Cubic meters.	Board feet.	Value.	Cubic meters.	Board feet.	Value.
To China:						
Timber .....	223	94,552	₱8,730	190	80,560	₱9,484
Lumber .....	6,463	2,736,072	121,009	15,270	6,474,490	254,828
Total .....	6,676	2,830,624	129,739	15,460	6,555,040	264,312
To Hongkong:						
Timber .....	1,166	494,384	72,842	413	175,112	6,474
Lumber .....	8,310	3,623,440	215,645	9,255	3,924,120	92,949
Total .....	9,476	4,017,824	288,487	9,668	4,099,232	99,423
Grand total .....	16,152	6,848,448	418,226	25,128	10,654,272	363,735

However, mill men report increased activity in this market during December, with increasing prices and numerous inquiries from China merchants giving prospect of as active markets as the shipping facilities will permit.

In addition to the shipments above mentioned, others were made to Japan, French East Indies, and Australasia, totaling 104 cubic meters (44,076 board feet) valued at ₱5,192.

As shipments were made to Australia during 1916 the continued orders from there would indicate a good possibility of the permanent introduction of Philippine lumber into that market when transportation conditions improve.

During the early part of 1917, the bureau secured the services of an experienced hardwood lumber inspector familiar with Philippine lumber, who was detailed to draw up a set of grading rules suitable to the local species.

As discussed in the report for 1916, the rules adopted by the National Hardwood Lumber Association were unsuitable for Philippine lumber; therefore the trade with the United States, China, and other foreign markets, as well as numerous local deals requiring special grades of timber, made the formation of a standard set of rules imperative.

#### REVISION OF GROUPS OF TIMBER TREES.

During the year there has been worked out a complete revision of the first, second, and third groups of timber, which, however, has not yet been put into effect under article 1821 of the Administrative Code. It will probably be promulgated during 1918.

There is no doubt that, as a whole, it will be proposed in its present form, but the progress of our botanical knowledge of the forest flora is so rapid that it is quite probable there may still be some minor additions and changes in nomenclature to the list as it now stands. The last regrouping was put in force about 15 years ago.

#### NEW FOREST REGULATIONS.

The forest regulations issued in 1904 were completely revised to conform with the new Administrative Code and were promulgated on September 11, 1917. They differ slightly in details from the previous regulations. The chief difference is that the duties and responsibilities of licensees are more clearly defined.

The jurisdiction of the bureau of forestry over all public land is more clearly defined; there had been previously a tendency to regard tidal swamps and brush areas as agricultural land.

The regulations regarding califgins were expanded, as experience has shown that the old regulations did not cover all phases of the subject.

#### RECOMMENDATIONS.

As already indicated in the discussion of remedies for existing evils, stricter legislation is needed.

1. A law should be passed punishing the illegal occupation of public land. This law will also oblige califgin makers to vacate the land or else homestead it. At present thousands of parcels of land are claimed by convicted califgin makers merely because the occupant is paying taxes on the land.

2. The penalty for the destruction of forests should be increased. At present the damages collected amount to double the forest charges for the timber destroyed, which amount to less than 15 per cent of the market value. The actual damages are much greater, as all small trees and seedlings are destroyed and the land, when abandoned, in most cases becomes a conon covered waste which can only be restored to productive use at great expense.

3. The penalties for evading the payment of forest charges should be made much higher for a second offense. At present they are only double the regular charges.

As for constructive legislation, the following recommendations are made:

1. *Reforestation.*—The bureau of forestry has already demonstrated its ability to carry on reforestation work. There also is no doubt about there being a scarcity of fuel and timber in certain sections of the Philippines. It therefore is recommended that legislation be secured appropriating money for carrying on systematic reforestation on a large scale.

2. More forest guards are needed. In Java, Japan, British India, and elsewhere, guards are employed to a much larger extent than in the Philippines. At least 50 additional guards should be employed to protect the forests under present conditions, thus releasing the rangers for other important technical work in line with their training.

3. It is necessary to have more clerks, not only for the Manila office, but also for the forest district headquarters with the steady increase of office work.

4. The illegal cutting of forest products should be classed as theft and treated as such.

5. In order to prevent the loss of revenue due to failure to invoice timber or other products, section 1520 of the Administrative Code should be changed so as to require the payment of forest charges on all forest products cut or gathered, whether removed from the forest or not, before a license will be renewed.

6. A new menace to the lumber industry has appeared. It affects only those who use lakes or sluggish streams for transporting logs. The appearance of water hyacinth (*Eichhornia crassipes*) in many parts of the Philippines, notably in Nueva Ecija, Laguna, Rizal, Camarines, and Mindanao, means that all still water will soon be impassable to rafts of logs, bancas, and even steamers. Legislation is needed providing for the destruction of this pest wherever found.

7. Section 1823 of the Administrative Code should be amended so as to include guards among those employees who are forbidden to have any pecuniary interest in forest products.

8. The digging up of rattan should be penalized by law. Every year thousands of small rattans are dug up for use as whipstocks and canes. Rattan can be had for these purposes without killing the plant, and therefore this restriction will work no hardship upon anyone but will prevent the diminution of the supply of rattan.

The needs of the division of investigation and forest school which are most urgent are the following:

1. Additional personnel, so that the advanced course in the Forest School can be offered.

2. Material equipment. There is needed the installation of a lighting system for the cottages and, when possible, the installation of a small power saw for use in the experimental work of the division.

3. There is need of an arrangement by which money received from the sale of products of the plantation and from charges for products on the Makiling reserve shall be made available for the use of the division of investigation at this place and on the reserve. This matter has been mentioned in previous reports and is increasingly important.

4. As noted under personnel, the demand in the Orient for forest officers having received training in the Philippine service is such that it is a serious problem to retain the men on their present salary. It is recommended that the salaries be placed on the same basis as in other scientific branches of the Government. Otherwise the Government will continually lose the services of trained men and be compelled to employ others who have yet to acquire the experience necessary to deal with the problems presented by local conditions.

5. The game law should be so amended as to make it obligatory for hunters in specified regions to secure permits from the forest officials and, if necessary, to entirely prohibit hunting in certain forests. The enforcement of game and fishing laws should be intrusted to forest officers as well as to other laws enforcing entitles, and more stringent legislation should be passed to prevent the destruction of fresh-water fish.

#### BUREAU OF LANDS.

The activities of this office have increased during the year. The applications to secure public lands by homestead as well as by purchase, by lease, and by gratuitous title have greatly augmented. Although it is to be desired that the approval and the issuance of patents be expedited as the applications increase, still a great deal of difficulty has been encountered, due to the fact that the personnel of the bureau of lands both in the field and in the central office, as well as that of the bureau of forestry, which cooperates with the bureau of lands in this matter, is insufficient.

With respect to mines, Act No. 2719 of the Philippine Legislature, which went into effect on May 14, 1917, has completely changed the system of disposing of coal mines, reserving to the Government the absolute ownership in those mines and permitting only their exploitation by means of lease.



Although the income from the friar lands estate does not equal that of 1916, still the amount received or collected is very satisfactory.

Notwithstanding the decrease in the personnel in the surveying division by reason of the retirement of almost all the American surveyors, still the cadastral surveys show an increase over those of previous years.

#### CHANGES IN ORGANIZATION AND PERSONNEL.

To succeed Mr. Rafael Corpus, director of lands, who was appointed under secretary of agriculture and natural resources on January 27, 1917, Mr. Maximo Mina was appointed and took possession of his office on April 28, 1917.

A large number of American employees who had retired under Act 2589 have been substituted by Filipinos.

#### PUBLIC LANDS DIVISION.

*Homesteads.*—The number of applications for homesteads filed during the past year is 8,922, exceeding that of 1916 by 734 applications. The total number of homestead applications received by the bureau to date is 52,106, the Province of Nueva Ecija being at the head of the list, with 2,078, an increase of 410 over that of the previous year.

Four thousand nine hundred and ninety-eight homestead applications were approved during the year. This is an increase of 1,653 applications over that of the previous year. The total applications approved up to the present time is 21,727. There were issued during the year 645 patents, an increase of 493 over that of the previous year. The total number of homestead patents issued up to the present time is 13,224.

The total number of homestead applications pending action by the bureau is 17,030, containing an area of 206,378.9754 hectares.

*Sales.*—There were received during the year 683 applications, which is an increase of 382 over that of the previous year. The number of actual sales made is 137, an increase of 23 over that of the previous year and covering an area of 23,337.6007 hectares. The sale value of the land was ₱64,440.23, and the amount actually paid to the bureau was ₱20,069.89.

The total number of sale entries up to date is 580. Four of these were patented during the year and 14 were canceled either at the request of the applicants or for failure to pay the balance of the purchase price; the installments paid or amounts deposited were forfeited to the Government in accordance with the law. The total number of existing sale entries up to the present date is 562, covering an area of 19,334.9551, and having a value of ₱273,651.90, the amount actually paid into the bureau being ₱113,896.56. The total of sale entries canceled is 52. The amount forfeited to the Government on account of these canceled entries is ₱157,703.09.

Four sale patents were issued during the year, covering an area of 52.8137 hectares. One thousand and fifty-four applications are still pending action through lack of certification by the bureau of forestry; on account of protests; waiting for guarantee deposits or on account of the fact the period of publication has not as yet been completed.

*Leases.*—There were received during the year 166 applications, which is an increase of 63 over the previous year. There were executed 42 leases, which is an increase of 37 over the previous year. The total number of leases executed to date is 87, having an area of 32,095.3822 hectares, which gives an annual rental of ₱16,883.73. There are at the present time pending 328 applications, which have a total area of 93,752.8920 hectares. The total number of canceled applications to the present time is 526.

*Free patents.*—There were received during the year 1,819 applications over that of the previous year.

There were canceled during the year 290 applications, for the reason that the applications showed in themselves that the applicants were not entitled to free patents. During the year there were issued 2,233 patents, making a total number of patents issued up to December 31, 1917, of 6,184.

At the end of the year 1916 there were pending action of the bureau 11,661 applications. This has been reduced to 10,957, the balance still pending action.

*Foreshore and lands under water.*—There were received during the past year 14 applications for the lease of foreshore and land under water. Four of these leases have been executed. The total number of foreshore leases exe-

cuted up to the present date is 99. Of these, 21 have been canceled, 22 already executed, and 56 are pending action.

**Reclaimed lands.**—There were received during the year 11 applications to lease portions of the reclaimed lands located in Iloilo and Manila. Two leases have been executed.

There are up to the present time 25 leases for reclaimed land, having a total area of 84,119.02 square meters, giving an annual rental of ₱26,378.80. Sixteen applications are still pending action and 3 are canceled. The total number of applications received up to the present date is 44.

**Insular government property.**—There was received during the year 1 application to lease private property of the insular government. One lease was executed during the year. The total number of executed leases to the present date is 6, which give an annual rental of ₱4,698.30. The total number of applications which have been received up to the present time is 13; 6 were executed, 5 canceled, and 2 are still pending.

**Coal claims.**—Act No. 2719, which regulates the acquisition and mining of coal lands in the Philippine Islands, was passed by the legislature on May 14, 1917. The secretary of agriculture and natural resources approved the regulations governing the leasing and development of coal lands on August 15, 1917.

The Governor General, by proclamation No. 39, dated October 18, 1917, has withdrawn from entry, sale, or other disposition all coal-bearing public lands within the Province of Zamboanga.

Under the old Act No. 1128 there were received during the year declarations of location of coal claims to the number of 84. The total number of declarations received up to the present time is 946; total number pending, 51; total number canceled or rejected, 887. Eight claims have been patented so far, having an area of 338,6180 hectares.

**Placer claims.**—During the past year there were recorded 265 declarations of placer locations, but no patents were issued. The total amount of patents issued for placer claims is 14, covering an area of 191,5826 hectares.

**Lode claims.**—One hundred and seventy-six lode claims were registered during the year, but only 2 patents were issued, covering a total area of 4,4670 hectares. Up to the present time the total number of patents issued is 73, having an area of 586,7899 hectares.

#### FRIAR LANDS DIVISION.

The conditions of the Friar Lands Estate during the past year have been very good, owing to the large area cultivated and the continued high prices of all agricultural products, and also through the activity of the employees of this division.

The registration cases of Imus, Lolomboy, and Pandi estates, which were taken on appeal to the supreme court, have been finally decided, the land being adjudicated to the government of the Philippine Islands.

The friar lands regulations were modified to a certain extent, allowing the bureau to rent vacant lots under certain conditions. This was done in order to facilitate the cultivation of all vacant areas and to cooperate with the present campaign for the increase of food crops.

The total number of lots sold during the year is 1,431, having an area of 3,054,5540 hectares, being valued at ₱666,655. There were leased 14 lots, having an area of 3,5212 hectares, with a value of ₱3,098 and an annual rental value of ₱154. The total receipts from all sources during the year amount to ₱1,243,563.46.

#### SAN LAZARO ESTATE.

During the year 58 lots, with an area of 33,112 square meters and valued at ₱97,692, were sold. The total amount of annual contracted installments is ₱107,249, and the annual contracted rental is ₱8,340. The total receipts for the year were ₱305,633.84, being divided as follows: Sales, ₱229,366.63; interest, ₱68,730.81; rents, ₱7,503.50; other sources, ₱32.90.

The following will show the status of the San Lazaro investment fund account:

	Amount.
Outstanding Jan. 1, 1917.....	₱168,394.81
New loans, 81.....	272,203.00
Repaid during year, 66.....	47,140.00
Loans canceled during year, 1.....	250.00
Renewed loans during the year, 95.....	32,394.00

	Amount.
Total outstanding Dec. 31, 1917.....	P393, 207. 81
Original fund.....	533, 102. 28
Interest added to date.....	14, 351. 31
Total of fund Dec. 31, 1917.....	547, 453. 59
Loans approved, checks in transit.....	20, 935. 00
On hand available for loans.....	118, 959. 47

## LAW DIVISION.

There were 730 notices received from the courts of first instance of several Provinces in which the applicants invoked the benefits of Chapter VI of the public-land act. The arrangements covered by these applications aggregated 32,960.4349 hectares.

Under Act No. 496 there were 261 cases presented, to 52 of which the bureau has filed opposition.

There were five cases filed in the court under section 61 of Act No. 926. All of these cases are still pending in the courts of first instance of their respective Provinces.

No new town sites were surveyed during the year. In the Baguio town site it was impossible to hold a public sale of lots owing to the lack of approval by the Legislature of the plans prepared by this office. A final decree by the court has been entered in the case of town site of Cabcaban, Bataan, during the latter part of the year 1916, which makes it impossible for the bureau to expedite the approving of the plat of the subdivision of said town site on account of the fact that the great amount of work prohibited the Legislature from taking any action during the close of their session at that time. On account of the pending appeal of certain cases covering lots in the Davao and Butuan town sites, no sales were made. These appeals have been recently decided by the supreme court and a sale of lots in these town sites will be held as soon as this bureau is able to secure the approval of the Legislature of the plat of the subdivisions made.

## SURVEYING AND DRAFTING DIVISION.

In view of the many radical changes in the personnel of this division through the operation of the Osmeña retirement act and the resignation of a considerable number of the more competent employees of this division, who resigned in order to accept a more lucrative position in private life, the work of this division has been most decidedly handicapped.

The work of the surveying and drafting division may be divided into three classes: Cadastral surveys, the execution of surveys of small, scattered tracts of land, and the verification of the surveys of small tracts of land executed by private surveyors.

*Cadastral surveys.*—A large portion of the surveying and drafting personnel is engaged in the execution of cadastral surveys under sections 1850-1857 of the Administrative Code of 1917. The execution of this class of surveys has proven to be by far the most efficient method of land registration and has been well distributed throughout the islands during the past year.

The following table is a brief summary of the action taken on cadastral work during the year:

	Dec. 31, 1916.	Dec. 31, 1917.
<b>Decreed by courts:</b>		
Hectares.....	174,664	119,667
Parcels.....	65,889	30,351
<b>Pending final action by courts:</b>		
Hectares.....	132,066	118,017
Parcels.....	49,332	36,691
<b>Pending in this office to be filed in court in 1918:</b>		
Hectares.....	172,857	91,542
Parcels.....	34,597	20,877
<b>Total for which field work has been completed, including decreed land:</b>		
Hectares.....	479,577	678,602
Parcels.....	139,965	158,334
<b>Total for which field work is in progress:</b>		
Hectares.....	165,420	200,000
Parcels.....	44,550	55,000

During the year a total of ₱672,281.79 was expended on account of cadastral surveys, as compared with ₱558,857.19 expended during the previous year.

The cadastral fund of the insular treasury as administered by the director of lands shows balances as follows:

On December 31, 1917:

Expenses .....	₱282,803.02
Repayments .....	74,743.72
Accounts receivable.....	2,456,243.44

Interest and penalties on deferred payments in the sum of ₱5,811.73 were collected during the year and deposited in the insular treasury.

The grand total of surveys executed during the year is 3,506, containing an area of 273,326.5706 hectares, at a cost of ₱163,019.45. Five hundred and ninety-one of these surveys, at a cost of ₱7,058.77, are special work orders. Three hundred and seventy-two surveys, containing 15,193.5016 hectares, at a cost of ₱44,640.71, are surveys under section 58 of Act 926. Two hundred and seventy-five containing an area of 3,161.77 hectares, at a cost of ₱17,702.37, are homestead surveys. The surveys of homesteads in the agricultural colonies and in the Vaca town site, Nueva Ecija, are not included herein. There were only 158 free patents investigated and surveyed during the year. They contain an area of 675.66 hectares, and the cost of the survey is ₱15,399.64. One thousand nine hundred and fifty-seven, containing 37,385.20 hectares, at a cost of ₱16,870.95, are surveys made by private surveyors.

#### BUREAU OF SCIENCE.

As in previous years this bureau has answered many inquiries and has endeavored to satisfy the demand for information on a great variety of subjects from manufacturers, professional men, and laymen. This demand has been greater than in preceding years on account of the stimulus given to economic and industrial development by the Government, of the more friendly attitude of the Filipinos toward capital coming into the Philippine Islands, and of the demand for raw materials stimulated by the war. The routine work of the bureau of science is continually increasing, as shown by the following statistics with regard to the bureau of science:

	Fiscal year—			
	1906-7	1909-10	1912-13	1916
Chemical and physical analyses and tests of metals, minerals, clays, cements, fertilizers, soils, fuels, waters, paper, gums and resins, foods, drugs, etc.....	3,064	9,353	15,602	19,823
Examinations of feces, urines, blood, sputum, gonococci, rabies, and rats for plague, and miscellaneous bacteriological examinations.....	26,449	34,913	152,471	365,645
Total analyses, tests, and examinations.....	29,513	44,266	168,073	385,468
Available appropriations .....	₱281,838.23	₱404,159.16	₱406,884.30	₱371,976

The manufacture and sale of vaccine virus, serums, bacterial vaccines, prophylactics, etc., have grown even more rapidly than the analyses, tests, and examinations listed above.

With such large increase in the amount of routine duties many employees are much overworked, and there has been time for little other than routine toil. There has not been enough time to give to inquirers all the consideration that they might have received, and much valuable economic research has had to be left entirely undone. The bureau of science should have a decided increase in available appropriation.

#### TECHNICAL EMPLOYEES.

The scientific and technical work of the bureau of science is very much undermanned. Scientific positions should be filled by men of training and ability, and the supply of able men is limited. Much important constructive work that should be done has remained undone for lack of personnel, and

there is the greatest and keenest need of more scientific employees for extending economic research in every line. The bureau of science also should be provided with demonstrators. The program of Philippine industrial development of the present Philippine Legislature will require a large number of thoroughly trained technical men, and provision for training men in factories and technical schools is much needed.

#### BUILDING.

The new building to contain the operating and bleeding room for serum animals and two small laboratories for use, in connection therewith were completed and occupied during the year. The demand for serums and vaccines is greater than the bureau of science can supply, and there is great opportunity for the commercialization of this work in the Philippine Islands if proper facilities are provided. The modern operating and bleeding room should be extended to provide for a serum laboratory in the same building.

#### AQUARIUM.

The aquarium has received much favorable comment from visitors from many parts of the world. The aquarium of the bureau of science has been so successful that the director of the bureau has received letters requesting information that might be of assistance in establishing aquaria in San Francisco and in Singapore.

#### COOPERATION AND PUBLICITY.

The information in the bureau of science that will benefit or improve agriculture, health, mining, industrial, commercial, and other economic conditions has been more and more used. Many inquiries can be now answered by the bureau of science by sending copies of industrial press bulletins—of which we have now issued nearly a hundred—of industrial resources of the Philippine Islands folder, Philippine bureau of science charts, or by reference to the Philippine Journal of Science or other sales publications.

#### FISHERIES.

The greatly increased cost of imported foods and meats makes it imperative that Philippine fisheries be exploited to a greater degree than ever before. The work that the bureau of science has already been able to do and that is contained in its publications on economic marine products has been very much appreciated. Funds should be appropriated for a commercial marine and fresh-water products (fisheries) laboratory, survey, and hatchery; for fish propagation, culture, canning, preservation, and conservation, and for a fishery school.

#### STANDARDIZATION OF GOVERNMENT MOTOR TRANSPORTATION.

On January 3, 1916, his excellency the Governor General issued Executive Order No. 1, appointing "the government motor transportation committee," composed of the directors of the bureaus of public works, supply, and science. The duties of the committee are to "pass upon all purchases of automobiles or other motor vehicles by the government, with a view to standardizing the quality thereof." The committee has adopted as the standard passenger car the Ford automobile, for motor trucks of more than 1-ton capacity the White, and for less than 1 ton the Ford. The Harley-Davidson has been adopted as a general-purpose motorcycle and the Indian as a light-weight machine.

#### STANDARDIZATION OF SUPPLIES.

The permanent committee, known as the "committee on standardization of supplies," appointed on March 28, 1916, by his excellency the Governor General, and composed of the directors of the bureaus of supply, public works, and science, has been active. The intended use of each article, its source of supply, the manufacturing process involved, the control of specimens delivered, the method of sampling and analyzing, the segregation of descriptive matter, etc., was carefully considered. Specifications for Portland cement; automobiles;

draft, deep-well, and pitcher pumps; galvanized iron; adding machines; motor cycles; and carbon paper have been already adopted and published.

A method for assembling and disposing of dormant and serviceable stock in the various government offices has been studied, and a plan has been put into operation that will redistribute this property to where it is needed or will effect its sale.

#### INDUSTRIAL MOVING PICTURES.

The director of the bureau of science served with a committee of the Manila merchants' association to assist in its arrangements for the moving pictures depicting the scenic attractions and industries of the Philippine Islands that are to be given to the public of the United States and other countries by the Burton Holmes syndicate.

#### PHILIPPINE AGRICULTURAL CONGRESS.

The Philippine agricultural congress was held in Manila August 25-30, 1917. The bureau of science cooperated in every possible way to make the agricultural congress a success. A representative of the bureau of science was in attendance to answer questions of farmers and to direct them as to how they might best get the assistance of the bureau of science in solving problems that they desired to present. Fifteen articles that are of special interest to farmers were selected from bureau of science publications, copies prepared in Spanish and distributed at the congress.

#### MANUFACTURE OF TIKITIKI EXTRACT.

Under the provision of Act No. 2376 the bureau of science has continued its work of preparing extract of tikitiki for the treatment of infantile beriberi. A stock has been continually kept on hand, and during the year over 400 liters of extract have been prepared, probably sufficient to treat more than 8,000 infants, as compared with 300 liters of extract prepared in 1916, 200 liters in 1915, and 58 liters in 1914. This work is of very great practical importance, and the lives of thousands of children ill with beriberi have been saved by the administration of this prophylactic. The greater part of the stock prepared was distributed through the Liga Nacional Filipina para la Proteccion de la Primera Infancia.

#### ANTITYPHOID AND SMALLPOX VACCINE FOR THE PHILIPPINE NATIONAL GUARD.

Six thousand units of smallpox vaccine and 13,500 cubic centimeters, doses, or ampules of antityphoid vaccine were furnished at cost for the use of the Philippine National Guard. An order for 13,500 cubic centimeters of paratyphoid A and B vaccine is now being filled for the same organization.

#### INSTRUCTION FOR DISTRICT HEALTH OFFICERS.

While not a teaching institution, the bureau of science has continued giving an elementary course of common laboratory instruction to Philippine health officers who were assigned to and reported at the bureau of science for work. The full course lasts six weeks, and consists in bacteriological analyses of waters and milk; examination of feces for parasites, cholera, dysentery, and typhoid; serum reactions; and examinations of sputum and pus.

#### BACTERIOLOGY.

Cholera has not made its appearance in Manila, due perhaps to the work of eliminating carriers. In this task there has been close cooperation between the Philippine Health Service and the bureau of science, and it has been pursued throughout the year with unabated vigor. In connection with this work about 163,000 fecal specimens have been examined by the bureau of science for cholera. The routine examinations of water, milk, blood, sputum, plague, leprosy, gonococci, foodstuffs, etc., have been performed in addition to the large number of examinations for cholera. A large number of Wasserman's reactions were also performed. The study of pathogenic fungi and allied skin infections has been continued and some of the results have been published.

The bureau of science has continued the supervision of the bacteriological work of the sanitary health commissions, and, in addition, one assistant has been constantly detailed to duty with one commission.

The committee for the examination of lepers is composed of Dr. Johnston, chairman, and Dr. Wade, both of the bureau of science, and of Dr. Ordóñez, of the Philippine Health Service. During the year ending December 31, 1917, examinations of 297 new patients and 182 reexaminations were made, a total of 479.

The manufacture of biologic products has very much increased. The sera and vaccines disposed of are shown by the following list: Vaccine virus; mallein; antitetanic, antidiaphtheritic, antidyenteric, antimeningococcic, anticholera, antityphoid, and normal horse serums; and typhoid, typhoid and paratyphoid A and B, paratyphoid A and B, dysentery, *B. coli*, streptococcus, gonococcus, staphylococcus albus aureus, staphylococcus aureus, streptococcus-staphylococcus aureus albus, autogenous, staphylococcus albus, and rabies vaccines. The Pasteur treatment against rabies (hydrophobia) is now much more appreciated than formerly. The number of patients who received the treatment in the bureau of science, as well as the instances in which the vaccine is sent to outpatients by this institution in response to requests in the Provinces, have increased year by year.

#### BOTANY.

The accumulation of economic data and botanical exploration of and extensive and valuable collections from the unknown or little-known parts of Zambales, Rizal, Tayabas, especially that part formerly known as Infanta, and Camarines Provinces and Catanduanes Island have been made.

Three important papers, entitled, "An interpretation of the Rumphius's Herbarium Ambolnense," "A critical revision of the Philippine species described by Blanco and by Llanos," and "A Bibliographical Index of Borneo Plants," have been completed; and it is now planned to start the preparation of a new dictionary of plant names of the Philippine Islands and a critical enumeration of all known Philippine species, with an adjustment of the synonymy, in preparation for the final undertaking, a general flora of the Philippines. It may be possible to combine the Filipino names with the systematic enumeration, thus making a single publication that will include all the technical and local names credited to the plants of the Archipelago.

Some fungi causing diseases of economic plants submitted by employees of the bureau of agriculture and by others have been identified. Two diseases of the rice plant, not previously reported from the Philippines, have been discovered. A rot of the sweet potato, caused by *Rhizopus nigricans*, has been found on camotes. *Corticium salmonicolor*, the cause of well-known diseases of rubber trees, tea, etc., has been found to be the cause of a rather serious disease of citrus (the oranges), in the Philippines. A preliminary study has been made on a disease of the abaca plant, apparently caused by a bacterium.

Work on the accumulation of data regarding Philippine medicinal plants should be prosecuted with vigor. As soon as they can be correlated with chemical, pharmaceutical, and physiological studies of the active constituents, the results should be published.

#### ORNITHOLOGY AND TAXIDERMY.

The formation of a scientific collection is a necessary part of the study of birds' food habits and is carried on simultaneously with it.

Wherever possible a determination of plants, insects, etc., found in the stomach contents is made. Also the collecting of seeds and fruits eaten, or suspected of being eaten, by birds, and of the botanical materials by which the seeds and fruits may be identified, is important. A comprehensive index that lists nearly 8,000 generic bird names has been completed. This work will save a great amount of time whenever it is necessary to refer to the literature of any genus of birds.

#### ENTOMOLOGY.

**Bat roosts.**—The large fruit bats are not known to be of any benefit to men, but the very small bats feed exclusively on mosquitoes, moths, and other night-flying insects. Here is an animal that destroys one of man's worst enemies, the mosquito, and produces therefrom one of the most useful products.

The bureau of science is encouraging the building of bat roosts in the Philippines as an aid to the destruction of mosquitoes. The bureau of science has prepared plans for a bat roost and a bill of materials for the same, which it

distributes to any one who will erect a roost. A few copies of the plans have already been distributed.

*Silk.*—Ever since the bureau of science introduced silk culture in the Philippine Islands, it has called attention to this as a promising industry. It has been demonstrated conclusively that silk of excellent quality can be produced at a profit. Several pamphlets have been published describing the industry and instructing the smaller farmers as to the best methods. The feeding and rearing of silkworms is a continuous process at the silk house of the bureau of science, and a girl may learn the details here at any time.

#### CHEMISTRY.

Although the time of the chemists has been so occupied by routine work, particularly during the last few months, that it could not be completed during the regular working hours, still several studies have been finished and other investigations are in various stages of completion. The investigations are all directed along the lines of Philippine industry and development. The director of the bureau of science in his report describes these industrial studies under the headings, lime, salt, caustic soda, bleaching powder and chloroform as a denaturant, water field survey, radioactivity, mineral springs, water purification, clays and clay products, concrete deterioration, course in cement testing, soil, fertilizer tests with molasses, sugar work, nipa sugar, castor oil, leather industry, control of Manila city gas, weights and measures, iron, corrosion, paint, nipa dye, daluro stoppers, bast fibers, rubber, timber testing, anay extermiator, copra drying, fuels, copra meal as fuel, coconut shells and husks, wood fuel, etc.

The present war has brought about a shortage of caustic soda, which is one of the most used in Philippine industries, about 1,500,000 kilograms, at present prices worth more than ₱500,000, being imported annually for the manufacture of salt and for other purposes. The bureau of science has done all within its power to encourage the manufacture of caustic soda in the Philippines and a lengthy memorandum on the subject is available to any one interested. The figure shows that the manufacture of caustic soda in the Philippine Islands is a commercial possibility, even when the by-products are not taken into account and conditions return to normal. This industry would stimulate other manufactures such as lime, salt, bleaching powder, chloroform, etc. The city of Manila uses over 100 kilograms of bleaching powder per day in the purification of the city water supply.

A large amount of time has been devoted to the examination of water from various sources, with a view to determine their availability for use as municipal supplies, boiler use, and irrigation. The field survey has been extended in Sorsogon, Negros, Cebu, Misamis, Rizal, Laguna, Nueva Vizcaya, and Mountain Provinces.

The method devised by the bureau of science for sterilizing demijohn is now in operation in two of the largest water companies and appears to be giving satisfactory results. A report on the comparative value of chloramine and hypochlorite as water disinfectants was made. On account of its easily corroding action on material such as limestone an examination of Pasig River water showed the inadvisability of using limestone on the face of the Jones Bridge below the water line.

Many samples of clay have been passed upon as to their suitability as pigments, raw-cement materials, and for the manufacture of vitrified and common bricks, tiles for roofing and flooring, for making pots, clay stoves, and other pottery products, etc. The bureau of science has also made molds for and given technical advice to kiln operators and to the Philippine health service, in order to develop the industry of the manufacture of vitrified clay pipe for the system of toilets that the health service is endeavoring to introduce into the towns of the islands. A pottery kiln is now under construction and nearly completed, in order to make fire tests on a larger scale.

Samples of concrete have been collected from Philippine structures that have failed, in an effort to determine the cause of failures and to formulate from the results obtained methods by which such deterioration may be avoided.

The bureau of science is giving considerable help to some sugar centrals in determining the true cause of the low yield of sugar from cane. In some cases the trouble is entirely mechanical, for the units are not properly set nor coordinated, and the tubes of the triple effect and other units are not protected from corrosion and scale. It is most necessary always to have intelligent mechanics



in charge of a plant. The bureau of science is completing the installation of an experimental laboratory unit for demonstrating new methods of working up juices and of producing strikes from sirups.

The bureau of science has continued its assistance to tanners. After a careful investigation of conditions prevailing in local tanneries a chemist of the bureau of science has succeeded in preventing the putrefaction of sole leathers, thus rendering a valuable service to local tanners.

The bureau of science is making for the city of Manila daily tests, calorific value, purity tests, etc., of the gas now being manufactured by the Manila Gas Corporation, in order to afford the necessary means to protect and safeguard one of the public interests.

The certification of sets of weights and measures for the provinces and municipalities has continued. No weights are allowed to pass from the bureau of science unless they are sufficiently accurate to be used as secondary standards without correction.

The first portion of the work on the comparison of linseed and the lumbang oils has been completed. The results thus far obtained demonstrate that the lumbang oils are valuable and efficient paint vehicles, comparable in many respects with linseed oil.

The extract of nipa was found to contain an interesting and valuable coloring matter suitable for leather, wood, and perhaps for other products, and its study will be continued.

A thorough study of the physical properties of bast fibers is being made by the bureau of science, which will encourage cultivation and development of the manufacture on a commercial scale of those fibers that prove to have sufficient strength and durability for cordage purposes.

The studies of the bureau of science show that rubber in the Philippine Islands is at present comparatively free from fungus and other diseases, and most of those so destructive to rubber in other countries have not yet been found in the Philippines. The future for the rubber industry in the Philippine Islands appears to be very bright.

There has been a great demand from the city engineer and many sources for tests of Philippine timbers. This work is now under way. At first the work will be confined chiefly to apitong and tangill, but such results on other common timbers, such as lauans, the yacals, guljo, lumbayao, etc., as are possible will be secured. It is hoped that the data of the tests may show the suitability of Philippine timbers for use in the construction of wooden ships.

The bureau of science method for drying coconut meat is exceedingly simple and consists briefly in putting the opened nuts on trays and subjecting them in a closed space to the fumes of burning sulphur (sulphur dioxide, sulphuric acid anhydride). After this treatment the nuts are put under a shed or in the sun to dry, the completion of which requires four or more days, according to atmospheric conditions. The only apparatus required is a wooden box of proper size, a few trays, and a four-wheeled car mounted on a wooden track. Details and a photograph giving all dimensions of the equipment may be obtained from the bureau of science on application. Such treatment will greatly improve the product. Not only is the keeping quality of the copra improved but the action of the sulphur fumes is to kill all mold spores, thus preventing the growth of molds during the drying process, to soften the cell walls of the coconut meat so that the moisture comes out readily, and to make an exceptionally white and uniform product. There is no loss of oil during the process, and a greater weight of copra is obtained, for no oil is destroyed by growing organisms.

There is a large quantity of coconut meal now in the Philippine Islands which can not be exported because of lack of transportation. This meal should be used locally as a fuel. It has worked efficiently in the bureau of science 67-horsepower Otto suction producer-gas plant designed especially for low-grade Philippine coal, and also under its Babcock & Wilcox boiler, which has an elongated fire box. For fuel purposes a ton of copra meal is equal to about 0.6 ton of ordinary coal. The ash resulting from the combustion of copra meal is very valuable as a fertilizer ingredient on account of its potash ( $K_2O$ ), and wherever copra cake is burned the ash should be saved.

The bureau of science has demonstrated the usefulness of coconut shells and husks for fuel and other purposes. Tests of a machine for producing fiber from husks have been completed. The most economical use of coconut shells as fuel is in a properly designed producer-gas plant.

As much laboratory technical work has been accomplished in the various lines of chemistry as the pressure of more urgent work would permit. However, resignations and absence on leave have reduced the number of chemists to the breaking point. It must be realized and remembered that in spite of the fact that technical research is necessary for the proper economic development of the country with the present shortage in personnel little time can be devoted to such work in the future unless more men are available or unless a marked decrease in the amount of routine work takes place.

#### FOOD AND DRUG INSPECTION.

The chief organic chemist is the bureau of science representative on the board of food and drug inspection, which meets bimonthly to render decisions on all questions related to the enforcement of the food and drug acts and amendments. The great increase in the cost of pure-food products would seem to furnish an incentive for their adulteration. The bureau of science has maintained a close inspection of foreign and domestic products and by analyses has furnished evidence that has given protection to the public against the use of adulterated foods and beverages that are unfit for human consumption or are injurious to health. The public has been protected against the use of such injurious substances in foods as saccharin, poisonous dyestuffs, arsenic, preservatives, inferior substitutes, ground glass, filth, ptomaines, etc.

#### MINING.

The force has been so small that it is impossible to carry on all the work. The absolutely necessary work can probably be kept going with three employees if the ranks can be kept full of competent men. The work that one man can do is very small in comparison with what should be done. The bureau of science should have well-trained geologists immediately.

In spite of the handicap of the seriously depleted condition of the staff during 1917, an attempt has been made, with the assistance of other divisions of the bureau of science, to handle the work presented. The Legislature has shown a great deal of interest in mining. A great deal of advice has been given with regard to prospecting for coal development work, the operation of Act No. 2719, to provide for the leasing and development of coal lands in the Philippine Islands, etc. In order to encourage prospecting in new districts, of which the bureau of science has no records, an analysis of the first sample of each variety of coal is made free of charge, provided that it is accompanied by reliable detailed information. The very great interest being manifested in mining by the Government, by private mining engineers, and by the public, warrants a considerable increase in the geologic personnel; in fact it is impossible to do the work required by the coal-leasing act until additional men are secured.

#### LIBRARY.

The additions to the library during the year consisted of 4,520 bound volumes, 606 unbound volumes, and 1,189 pamphlets, making a total at the end of the year of 38,720 bound volumes, 3,969 unbound volumes, and 17,442 unbound pamphlets.

The course given in library science in the college of liberal arts, University of the Philippines, by the librarian of the bureau of science and others will do much to relieve the need for routine library assistants.

#### PHILIPPINE JOURNAL OF SCIENCE.

During 1917 the Philippine Journal of Science was issued, as usual, in four sections, each of which contained six numbers. Each section is separately paged and indexed. The following table shows the number of pages, plates, and text figures contained in each section of Volume XII (1917):

	Section A.	Section B.	Section C	Section D.
Pages.....	316	340	391	436
Plates.....	11	10	17	19
Text figures.....	12	9	8	16

Twenty-six press bulletins on industrial and technical subjects have been issued during the year. The bureau of science also has issued weekly reports of its work for the information of the public. These, besides giving an account of the examinations and analyses for each week, include interesting paragraphs about the work of the bureau of science.

It is gratifying that during these disturbed times the Philippine Journal of Science has had an even greater increase in its paid subscription than was recorded for 1916 over 1915.

#### CLERICAL WORK.

There have been a number of changes and readjustments in the clerical personnel in an effort to acquire the greatest possible efficiency in handling the clerical part of the large amount of technical work that devolves upon the bureau of science. All of the stenographic work in the bureau of science is now done by Filipinos.

#### PHOTOGRAPHY.

The photographer has made several provincial trips to make still photographs and cinematograph films for the Government and for private parties, as well as the usual amount of work for the Philippine General Hospital, College of Medicine and Surgery, University of the Philippines, and other Government bureaus and offices.

#### WEATHER BUREAU.

Only two typhoons crossed the archipelago through the Babuyan Islands in August and September. Two very destructive typhoons were experienced in Formosa in July and August and two in Japan in October, all of them having been properly forecasted by the Manila Observatory for several consecutive days. Considerable damage was done by floods and excessive rains in the southern part of the islands and in northern Luzon during the last part of the year, the sugar planters of Negros and the tobacco planters of Cagayan being mostly affected. A new official station was established at Mambajao, Camaguin Island. The number of voluntary rain stations increased from 11 in 1916 to 32, sending regular observations at the end of 1917. A daily meteorological cablegram, kindly furnished by the Guam Naval Station, has been of the greatest value to the forecasting of typhoons.

Although 140 earthquakes were reported from different parts of the islands, the damage done was slight and the casualties were few. Frequent earthquake shocks with rumblings, causing anxiety to the inhabitants around Mount Isarog, occurred at the beginning of October. The establishment of a seismic station in the vicinity of Mount Isarog has been approved by the Legislature. The Catarman and Hibokhibok volcanoes of Camaguin Island were closely examined. The magnetic observations for 1911 taken at Antipolo have been printed.

Since October 1, 1917, the observatory time signals are broadcasted by the Navy radio, Cavite, at 10.55 a. m. and 9.55 p. m. for five minutes. The introduction of the radio transmission of time is the combined effort of the United States Navy, bureau of posts, and Manila Observatory.

Respectfully submitted.

G. APACIBLE,

*Secretary of Agriculture and Natural Resources.*

**THE GOVERNOR GENERAL, Manila, P. I.**

# FIRST ANNUAL REPORT OF THE DEPARTMENT OF COMMERCE AND COMMUNICATIONS.

APRIL 30, 1918.

GENTLEMEN: I have the honor to submit the following report of the activities of the department of commerce and communications for the fiscal year ended December 31, 1917. This department was created by Act No. 2666, entitled "An act to reorganize the executive departments of the Government of the Philippine Islands," and its organization commenced on January 15, 1917, upon the appointment of the department officials.

The following bureaus are under the executive control of the department of commerce and communications: Bureau of public works, bureau of posts, bureau of supply, bureau of labor, bureau of coast and geodetic survey, and the bureau of commerce and industry, which has been recently created by Act No. 2728.

## COMMERCE.

The commerce of the Philippine Islands has decidedly taken a turn to the better during the year covered by this report. The tendency to complain of hard times which was conspicuous among the business men, particularly of Manila, no longer exists, and a justified optimism has taken its place in the minds of the business community of the islands. The signs of prosperity are unmistakable. Circulation has increased from ₱67,059,189.04 on January 1 to ₱102,580,313.57 on December 31, 1917, showing an increase during the year of ₱35,521,124.53. Foreign trade has increased from ₱230,867,040 to ₱322,802,674, as compared with last year's figures, leaving a trade balance of ₱59,614,552 in favor of the islands. The volume of business has also shown a big increase, as the report of the collector of internal revenue discloses.

Two things, however, have contributed to retard somewhat the prosperity in certain district of the islands—the scarcity of bottoms, both foreign and domestic, and the stagnation prevailing in the sugar market.

The foreign shipping shows a gradual decline, both in number and tonnage, since the beginning of the war. The number of entrances and clearances of vessels engaged in foreign trade during the last year was only 1,300, as against 1,423 in 1916, 1,428 in 1915, and 1,501 in 1914, and as for the tonnage the aggregate amounted to 2,920,692 in 1917, as compared with 3,153,470 in 1916, 8,398,805 in 1915, and 3,802,117 in 1914. Such decrease in the foreign shipping coincides with a period of increased production in almost all the commodities for export, thus creating a congestion in every one of the ports of entry. Had there been more ships available to carry foreign trade, the quantity and value of the exports could have been much greater than what they were, for there existed elsewhere a great demand for our products.

Similar conditions prevail in the coastwise trade, for while the number of entrances and clearances show an increase, on the other hand the aggregate tonnage shows a decline. As the increased production affects the coastwise shipping as much as the foreign one, shortage in the domestic shipping facilities has also been very keenly felt.

The most regrettable feature in this scarcity of shipping is the inability of either the insular Government or the private concerns to acquire boats with which to engross our shipping facilities. Most of the countries of the world have prohibited the sales of their boats, and no shipyard would accept an order except for delivery in an indefinite time. Local shipowners and merchants are willing to pay the high prices demanded for any kind of boat, but even the Shipping Board of the United States would not grant permission to transfer boats to Philippine waters. As the war lasts longer the shipping difficulties will grow more acute, and the only remedy at hand is to foster the construc-

tion in local waters of wooden schooners in number and tonnage big enough to supply our needs.

The output of sugar has decreased considerably during the year in view of the unfavorable weather conditions, and the quantity exported in 1917 shows a decided decline if compared with that of the previous year. The prices paid for this staple were in the average high, but the lack of transportation has affected the product more than any other of our export commodities. At the middle of the year warehouses in Iloilo were filled with stocks which, at the time, appeared impossible to move, as the transportation companies preferred other cargoes capable of bearing high transportation rates. The congestion in Iloilo warehouses was, however, relieved by the ex-German boats, which were devoted entirely to the transportation of sugar in their outward trips to the China coast and Japan.

The outlook of the sugar industry is none the better as, it is understood, this year's crop is below the average. Unfavorable weather conditions are generally assigned as the cause of this failure. But whether or not the crop is large, there still remains the question of transportation, which, in the case of sugar, looms forward dark and hopeless unless the war is ended in a very near future.

To offset these difficulties, the prices of hemp had never been higher than during last year, and the production of this staple has greatly increased. The tobacco industry is also very prosperous, and the result of the publicity campaign undertaken by the bureau of internal revenue, in accordance with Act No. 2613, is that the demand is now greater than our factories can supply, and the Filipino cigars are now commanding favorably high prices in the United States. Copra export has shown a slight increase over last year's figures, though the decline is marked, if compared with figures of the years previous to 1916, but this decline is amply compensated by the coconut-oil export during the year. The conversion of copra into oil has become one of the most important businesses of the country, oil plants being constructed in the different districts of Manila, and the orders for oil machinery are such that it is predicted that within a short period the whole copra production of the islands will not be sufficient to supply the need of oil factories. Filipino capital is becoming more enterprising every day. New corporations are being organized, and they now participate in running business heretofore entirely handled by foreign capital.

All this prosperity, we have to confess, is entirely due to the natural growth of the business of the islands and particularly to the fact that we are far remote from the seat of war. The department has not done much to foster commerce, much to the regret of the department head, as he was not provided with the proper instrumentality for the promotion of business, either foreign or domestic. These conditions, however, have been remedied, as the Legislature passed in its last session a law creating the bureau of commerce and industry, the principal purposes of which, briefly stated, are: To promote and further the development of foreign and domestic trade, mining and fishing, land, river, and maritime transportation, and commercial and industrial organizations; to collect and distribute statistical data and information; to establish commercial museums and expositions; to organize and maintain commercial exchanges; and to compile and publish the tariffs of other countries.

#### BUREAU OF PUBLIC WORKS.

The increase in collections from cedula taxes and the resulting increase in real estate taxes by reason of the recent revision of the land assessments, coupled with the annual large appropriation from the Insular Government, are accumulating funds for public works much in excess of what can be efficiently expended with the present organization of this bureau. The total amount expended under the supervision of the bureau of public works shows the limit of the money that can be expended, unless the personnel of the bureau is increased.

The total number of technical employees as of December 31, 1917, is 122, 43 of which are Americans and 79 are Filipinos, as compared with 63 Americans and 35 Filipinos in 1915, 81 Americans and 24 Filipinos in 1914, 80 Americans and 21 Filipinos in 1913, and 143 Americans and 10 Filipinos on June 30, 1911.

In number, the technical force of the bureau has increased somewhat if compared with that of the year 1915, but a great number of the Filipino technical employees are unclassified, most of them being graduates of the college of engineering of the University of the Philippines who were given appointment

as junior civil engineers without passing any examination, just because we are short of technical assistance, and it becomes necessary to give them practical training as soon as possible to fill the gap that the American engineers, who are leaving the bureau to join the military service, have created in the technical force of this bureau.

The work of the bureau materially increases every year, and the demand for more engineers is of course greater, whereas the supply is very limited, not only because very few Filipinos are taking the course in engineering, but also because the supply of engineers in the United States and elsewhere is much less. Unless conditions change, the appropriation for public works should be curtailed to an amount commensurate with the number of technical men available. This is particularly true in regard to the designing division, whose work is more technical in nature, and it is believed that special effort should be made in order to retain in the service such designing engineers now employed in the bureau as have shown efficiency in their respective lines of work.

#### ROADS AND BRIDGES.

Besides the road and bridge funds collected by the Provinces from cedula tax, land tax, and their participation in the internal-revenue taxes, the Philippine Legislature appropriated ₱3,000,000 for roads and bridges (Act No. 2704) for the regularly organized Provinces alone, ₱2,000,000 of which were distributed at the discretion of this department. In the distribution of these funds the requirements of the different Provinces had been taken into consideration. Each and every Province had had its participation as the commercial importance of its highways, the nature and quality of its equipment, and the labor supply in each locality had justified. Generally speaking, the ability of the Province to judiciously spend the money has served as the basis in fixing the amount to be allotted.

The tendency has been toward the nationalization of the road system. Highway development for outlying districts has been encouraged, and insular aid was specially given to interprovincial roads. Thus in northern Luzon preference was given to a thorough highway system from Manila to the farthest town (Bangli), and another road is being constructed between San Jose, Nueva Ecija, and Imugen, Nueva Vizcaya, in order to give the isolated Cagayan Valley an outlet to the central Luzon. In southern Luzon a road system will soon connect the three Bicol Provinces. In the island of Panay, Antique Province will be opened to wheel traffic both from Iloilo and from Capiz, and in the other less important islands intercoastal roads are being undertaken.

The same thing can be said of other Provinces. Pampanga is being connected with Tarlac and Bataan, Cagayan with Isabela, Batangas with Tayabas, and in general the roads that are being undertaken now look forward to a time when the whole road construction in the islands will constitute one insular road system.

The number of kilometers of surfaced roads completed amounts only to 299.1 as against 368.5 of the preceding year.

The road maintenance cost in 1917 ₱592.82, as compared with ₱508.98 for each kilometer in 1916. This higher cost can be attributed, not so much to increased cost of labor, as to the destructive effect of heavy motor traffic and the rapidly increasing number of motor vehicles.

As to bridges, plans have been prepared for some 340 linear meters of temporary bridges, 250 linear meters of concrete low-grade bridges, and 930 linear meters of reinforced-concrete bridges. The total number of bridges constructed during the year is 214, the most important of which is the Baroro Bridge, of La Union Province, consisting of twenty-two 9-meter spans, or a total span of 198 meters.

In view of the difficulties of acquiring materials, by reason of delayed transportation, high freight rates, war-ammunition competition, etc., substitution and rearrangement have had to be made in most of the plans for permanent construction. Such a handicapping condition has, of course, affected the progress in bridge construction, and temporary structures have been substituted in many cases. Native timber truss bridges have taken the place of concrete structures, as it has been figured out that their ultimate cost will be less, in view of the present prices of permanent materials, than if the permanent types were erected.

For about two years the bureau has been experimenting on the low-level concrete-bridge type, with approaches reaching back to the high-water contour

and with sufficient stability to pass extreme floods. So far they have proved to be a success, and it is believed that it is susceptible of further development, especially in the flashy streams of northern Luzon.

#### PORT WORKS.

The road work that has been in progress for about 10 years with unabated enthusiasm should now be supplemented by dock facilities. The awakening in the economic life of the Philippines emphasizes the necessity of centering the road construction to the natural ports and of fostering the extension of port-work development. On account of the geographical formation of the Philippines, merchant-marine, and overseas trade will always be the most important means of communication, and it is believed that the time has come when energetic activities along the line of improved harbor facilities should be undertaken.

The Government equipment for port works should be increased and a more ambitious program outlined for the years immediately to come. Great progress has been made in the past, but the increase in production has been larger, and the demand for dock facilities by the producing centers and by the interisland freighters has been constantly increasing. Work along this line has been practically completed in Manila and Iloilo, an extension is being built in the port of Cebu, and other works are in progress in Tacloban, Leyte; Calbayog, Samar; Zamboanga, Mindanao, and Tagbilaran, Bohol.

#### BUILDINGS.

A decided change in the policy as to the construction of Government buildings has taken place during the year covered by this report. The standard Government building, devoid of all kinds of embellishments, is gradually being abandoned. A new set of plans is being made for each Province, and architectural ornaments are being added to the extremely plain and severe construction of the past.

Local materials are being used to secure better color and richer expression in concrete buildings. The first result of this policy will be the Pangasinan Capitol Building, which will be completed within this year. The Leyte Provincial Building, with a different design, but with the same imposing and pretentious architecture, will soon follow, and the Insular Building, for which an appropriation has been secured this year, will mark the parting point between the design of the past and the ornamental construction of the future.

The Government has now in its employ practically all of the best-known designers in the Philippines, and it is believed that its construction should set the standard of buildings all over the Islands—hence the necessity of making Government buildings not only utilitarian but also beautiful. And in view of the fact that the present structures are all durable and bound to endure for a good many years to come, it would seem desirable that the Government set the example for ornamental construction, it being understood that buildings owned by private concerns will soon follow the Government lead.

#### WATERWORKS AND IRRIGATION.

Progress in the construction of systems of water supply is being delayed by the difficulties in acquiring machinery, piping, and other supplies entering into waterwork construction. Practically all the money allotted last year for this purpose is unexpended, though final plans and estimates were completed in time and materials requisitioned. With the entrance of the United States into the war and the commandeering of American shipping for the war traffic, the possibility of obtaining these materials is becoming every day more difficult.

Except water-rights determination and adjudication of established irrigation systems, with the concomitant surveys and apportionments of available water, nothing has been done on the line of irrigation. Lack of funds is the only reason for this inactivity. With the shortage of food production, more keenly felt now on account of the lack of transportation, the establishment of irrigation systems is becoming more urgent. Already a great number of localities are asking for Government aid along this line.

A resumption of irrigation activities has been sanctioned by the Legislature, an appropriation of ₱1,000,000 having been made for this year. It is to be

regretted that a compilation of hydrographic data has been abandoned in the last five years, as the lack of such data is constituting now the greatest handicap in the furtherance of irrigation work. The organization of the irrigation personnel, and especially of those upon whose shoulders the responsibility for hydrographic work will fall, is now in progress. But no immediate result can be expected, as the experience in the United States and in other irrigated countries of the world shows conclusively that it is extremely dangerous to undertake irrigation work without complete and accurate hydrographic information ranging for at least 10 years. It will, perhaps, be necessary to inaugurate our irrigation activities by the construction of small and unimportant irrigation systems, not only because the meagerness of preliminary information would not justify a more ambitious plan, but also because irrigation is a highly specialized line of engineering, and we have yet to prepare the available personnel by allowing them to study the science of irrigation and by giving them the necessary experience.

#### REGISTRATION OF MOTOR VEHICLES.

The number of motor vehicles registered during the year is 6,024, as against 4,835 of last year, an increase of 1,189 vehicles. It is recommended that the automobile law be amended so as to prohibit the use of steel tires for both motor trucks and their trailers and to limit the gross load of all motor vehicles. The inferior grade of surfacing material and the yielding of the subsoil of the road make legislation along this line imperative, as the economic condition of the islands does not warrant the expenditures of the Government treasure for the construction of more substantially built highways.

#### BUREAU OF POSTS.

There has been a decided progress in the activities of this bureau in every one of its numerous branches, as will be seen from the attached report of the director of posts. Worthy of being mentioned is the fact that for the second time in its history this bureau has been conducted on an absolutely self-supporting basis, its revenues having exceeded the expenditures by a handsome profit. The revenues and expenses of the bureau for the last three years are here quoted:

1915—Total revenues	₱1,555,391.03
Total expenses	1,653,793.86
Deficit	98,402.83
1916—Total revenues	1,833,517.43
Total expenses	1,760,405.19
Profit	73,112.24
1917—Total revenues	1,995,939.07
Total expenses	1,825,603.96
Profit	170,335.11

It will be observed that the revenues have been steadily growing, and although the expenses are also increasing, the net profit which was secured for the first time during 1916 has grown larger during last year.

It is not believed that the bureau of posts should be considered as a revenue-making bureau, at least during this period of constructive development in the history of the country. Said bureau being a means for extending modern knowledge, one of the most important factors in the interchange of ideas, and one of the necessary facilities for the promotion of commerce, it is recommended that the bureau's appropriation be increased yearly in proportion to the volume of its business and the total of its revenues.

This recommendation is necessary not only for the reason stated above but also because the employees of the bureau of posts are perhaps the most underpaid employees in the Government service. Certainly their salaries are lower than what is paid in other walks of life. Service in the bureau of posts, especially in the telegraph division, is naturally unattractive, in view of the long hours of work and the fact that work is required on Sundays and holidays.



With the low salary actually paid it is very hard to retain in the service men who have been trained in their technical undertaking in the telegraph school of the bureau and with long service to the Government.

The surplus should be spent, besides, for the expansion of the activities of the bureau. There are at present about 29 municipalities without post offices and a good many without telegraph, postal-savings bank, and money-order offices. Instead of reverting to the treasury the excess of income over expenditures, it would be wise to reappropriate the same for the extension of telegraph lines and for the payment of commensurate salaries to the employees of the bureau.

Last November the Eastern Extension Australasia & China Telegraph Co. ceased to operate its lines between Manila, Cebu, Iloilo, and Bacolod, the lines which they had been operating for 20 years. Thus the telegraph division of the bureau of posts has now the monopoly of the telegraph business of the entire archipelago, as all of the business heretofore handled by said company has been thrown to the Government lines. We were not prepared to meet this condition of affairs, but arrangements had been made at once to establish direct communications between Milagros, Masbate, and San Remigio, Cebu, thus obviating the necessity of routing the business through the islands of Samar and Leyte.

The importance of the ports of Cebu and Iloilo, however, is such that it is believed that these ports and Manila should be connected by radio communications. The volume of business has already assumed great proportions to justify the establishment of radio stations in these three cities. If we consider that an interruption in the now-existing cables will absolutely stop communication, and that these cables had been laid many years ago, the necessity of providing a means of telegraph intercourse for the southern cities, available all the time and at any time, is apparent.

#### BUREAU OF SUPPLY.

The abnormal condition of the world's market and the shortage of the shipping facilities made the work of this bureau very difficult during the period covered by this report. The closing up of the European market, the refusal of American manufacturers to receive orders due to lack of prime materials, and the uncertainty in the delivery of supplies already ordered are all contributing to the difficulties of buying such numerous supplies and materials as the Government needs. The commercial situation is further complicated by the action of the belligerent Governments in controlling the output of a good many of the most important factories.

The result has been that many orders were canceled and substitutions became necessary, because goods ordered could not be bought. In order to cope with this condition, and in view of the upward tendency of prices, it was found necessary to change the purchasing policy of this bureau. Accordingly, purchases have been made on the basis of a year's supply, instead of six months, as was previously done. This policy has already been amply justified by the fact that this bureau was able, notwithstanding the increasing difficulty in obtaining supplies, to fill the large number of requisitions received and at prices usually lower than the ones prevailing in the market. Because of the uncertainty as to the end of the war, and consequently as to the return to normal condition of the market, larger orders for stock supplies have been placed for the coming year.

In this connection it would not be amiss to invite attention to the fact that the work of this bureau is increasing as the activities of the Government are expanding. The creation of new governmental units as the bureau of commerce and industry, the Philippine National Guard, and the increase in the appropriation for public works, naturally affects the purchasing power of the Government. Thus during the year just closed the volume of the business handled by the bureau of supply amounted in the aggregate to ₱18,910,890.48 as compared with ₱13,569,680.49 for 1916.

Generally speaking, the business of this bureau has been increasing, though the records of last year are unprecedented, purchases having exceeded those of 1916 by 41.46 per cent and sales being 37.39 per cent more than that of the previous year.

#### THE ICE PLANT.

The gross earning of the plant is about 5 per cent larger this year than that of the previous year, but this increase is offset by the increased cost of opera-

tion due to high prices which enter into the manufacture of ice and refrigeration.

Five years ago the reconstruction of this plant was begun with the idea of converting the same into a modern concrete building. The cost of this reconstruction is deducted from the earnings of the plant, and the total amount expended for this work aggregated on December 31, 1917, ₱763,490.09. The only portion of the building yet to be rebuilt is the roof over the engine and fire rooms, and it is believed that with an allotment of ₱25,000 the same will be completed during the current year. Upon its completion the entire earnings of this plant less the operating expenses will be turned over to the treasury.

#### BUREAU OF LABOR.

Worthy of being noted among the activities of this bureau is the abnormal number of strikes which took place during the year. There were 37 strikes in Manila alone.

The cause of these strikes can be assigned to the high cost of the necessities of life, and the natural tendency of the employers to refuse increase in wages asked by the laborers. Most of these strikes have been settled, however, to the satisfaction of both parties by a reasonable increase in the wages, and it can be said that the average wages paid nowadays, particularly in the city of Manila, have increased during the year.

The appropriation of ₱100,000 made by the Philippine Legislature made it possible to direct immigration toward the Provinces under the control of the Department of Mindanao and Sulu, and 2,956 laborers were sent to that territory. The experiment conducted along this line has proven a success, and the result already obtained paves the way for further development. It is known that while some Provinces are thickly populated, in others vast areas lie idle, waiting only man's efforts to convert them into producing regions. There is now but little doubt that immigration can be directed toward these uncultivated districts if the proper propaganda is carried out and Government aid can be obtained for their transportation. The redistribution of population is necessary in order to obtain the highest result from the toil and effort of each individual, instead of wasting them in the hopeless cultivation of exhausted lands. The problem of disposing of the public land in order to encourage the exploitation of its resources will also be eventually solved. Much can be done along this line, and it is recommended that a permanent organization charged with the duty of promoting immigration toward the districts wherein better results can be reasonably expected be created.

#### BUREAU OF COAST AND GEODETIC SURVEY.

The operation of this bureau has proceeded satisfactorily in accordance with the general plan previously determined, and much progress has been accomplished during the year. Its work has been greatly handicapped, however, by the shortage of funds, as the insular appropriation for this bureau was not sufficient to meet the tremendous increase in the cost of coal brought about by the prolongation of the war.

The work of this bureau is further retarded by the action of the Washington authorities in calling to the service of the Navy about 50 per cent of the officers devoted to coast and geodetic surveys, as a result of which all officers whose tours of duty in the Philippines ended during the last six months had to be sent to the United States without even hope of being relieved, the regular force for surveying in the Philippines having been reduced thereby to less than one-half.

Under this condition it became imperatively necessary to lay up the *Marinduque* and the *Research*, which boats were turned over to the insular Government for such uses as the growing shortage in shipping may warrant.

#### CORPORATIONS.

Under the authority of the corporation law (Act No. 1459), orders for licenses for six foreign corporations were issued during the fiscal year, five of which are American corporations, and the other one is incorporated under the laws of Holland. One hundred and forty domestic corporations were registered, 22 of which are American, 41 are Filipinos, and 20 are Americans and Filipinos. The 22 American corporations have an authorized capital of

## 180 REPORT OF GOVERNOR GENERAL OF PHILIPPINE ISLANDS.

₱8,826,600, ₱6,851,600 of which are subscribed, and ₱6,467,940 are paid up. The 41 Filipino corporations have ₱6,049,610 authorized capital, ₱3,737,605 subscribed capital, and ₱3,138,497.98 paid up capital. The 20 American and Filipino corporations have ₱3,974,000 authorized capital, ₱2,026,674 subscribed capital and ₱1,796,901 paid up capital.

### REPORTS OF THE BUREAUS.

For the details of the operation of the different bureaus of this department, reference is hereby made to their reports appended hereto, which are made a part of this report.

Respectfully submitted.

DIONISIO JAKOSALEM,  
*Secretary of Commerce and Communications.*

THE GOVERNOR GENERAL AND THE PHILIPPINE LEGISLATURE.

# INDEX.

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## ABACA:

Inspection of: 153.

Production of: 5, 150.

ACCIDENTS, reports of: 133.

AGRICULTURAL COLONIES, conditions in: 38, 69.

Work of: 156.

## AGRICULTURE:

Appropriation for: 155.

Bureau of—

Organization: 150.

Personnel: 150.

Work of: 149.

Conditions of: 149.

Demonstration Division, work of: 152.

Non-Christian tribes: 38, 60.

Publications: 153.

Value of crops: 150.

## AGRICULTURE AND NATURAL RESOURCES, DEPARTMENT OF:

Bureaus under: 149.

Report of secretary: 149-172.

Work of: 20.

ALEERT, DR. ALEJANDRO, mentioned: 14.

## ALCOHOL PRODUCTS:

Output: 119, 120.

Value of: 119, 120.

AMERICANS, employees, number of: 11.

ANIMAL HUSBANDRY DIVISION, work of: 150.

## ANIMAL INSURANCE:

Provisions for: 154.

APACIBLE, G., report of: 149-172.

AQUARIUM, condition of: 166.

ARRASTRE DIVISION, work of: 117.

ASSESSMENTS, amount of: 32.

AUTOMOBILE LINES, number of: 134.

AUTOMOBILES, imports: 114.

## BAGUIO, CITY OF:

Advisory council: 51.

City council: 51.

Financial statement: 51.

Mayor's office: 51.

Organization: 50.

Personnel: 50.

## BANKS:

Agricultural bank loans: 112.

Philippine National: 7, 18, 19.

Private: 111.

Resources and liabilities: 111.

## BANKS AND BANKERS:

Capital: 122.

Circulation: 122.

Deposits: 122.

BANKS AND BANKING, report on: 111-112.

BANK NOTES, issue of: 103.

BARRETTO, ALBERTO, report of: 103-123.

BEWLEY, LUTHER B., mentioned: 14.

BILIRID PRISON, prisoners in: 136.

BOHOL FILIPINO RICE COLONY, work of: 156.

BONDED INDEBTEDNESS, statement of: 110.

BONDS, railway, guaranty of interest: 110.

BOTANY, investigations: 168.

## BRIDGES:

Appropriations for: 175.

Construction of: 175.

BUDGET, consolidated statement: 9.

BUDGET SYSTEM, establishment of: 19, 104.

- BUILDINGS, construction of: 176.
- CACAO, production of: 150.
- CADASTRAL, cases filed: 130, 131.
- CADASTRAL SURVEYS, work done: 164.
- CARPENTER, FRANK W.:
  - Appointment of: 12.
  - Report of: 58-84.
- CATTLE AND CARABAO, imports: 114.
- CAUSTIC SODA, manufacture of: 169.
- CAYAGAN FILIPINO RICE COLONY, work of: 156.
- CEMETERIES:
  - Number opened: 16.
  - Report on: 95.
- CEDULAS, collections: 122.
- CHARITY WARDS:
  - Financial statement: 46.
  - Patients in: 46.
- CHEMICALS, imports: 114.
- CHEMISTRY, work of division of: 169.
- CHICKENS, raising of: 156.
- CHOLERA:
  - Cases of: 93, 167.
  - Deaths from: 15.
- CIGARETTES:
  - Production: 121.
  - Value: 121.
- CIGARS:
  - Exports: 120.
  - Production: 120.
  - Value of: 120, 174.
- CIVIL SERVICE, American employees: 11.
- COAL CLAIMS, act regulating: 163.
- COAL, imports: 114.
- COAL MINES, development of: 8.
- COAST AND GEODETIC SURVEY, work of Bureau of: 24, 179.
- COCONUT MEAT, drying of: 170.
- COCONUT OIL, growth of industry: 174.
- COCONUTS:
  - Exports: 115.
  - Production of: 150.
- CODE COMMITTEE, work of: 132.
- COFFEE, production of: 150.
- COINAGE:
  - Circulation: 5.
  - Shortage of: 18.
- COINS, value of: 19.
- COMMERCE AND COMMUNICATIONS, DEPARTMENT OF:
  - Bureaus under: 173.
  - Report of Department of: 173-180.
  - Work of: 22.
- COMMERCE, value of: 112, 173.
- CONSTABULARY:
  - Cooperation with other bureaus: 41.
  - Financial statement: 41.
  - Law and order: 40.
  - Municipal police: 40.
  - Personnel: 40.
  - Strength of: 14.
- CONSTABULARY, BUREAU OF, work of: 14.
- CONSULAR DUTIES, work done: 117.
- COPRA:
  - Exports: 115, 174.
  - Production: 5.
- CORN:
  - Demonstration: 155.
  - Production of: 150.
- CORPORATIONS:
  - Capital stock: 180.
  - Registration: 179.

- COSTAS, DALMACIO, mentioned: 8.  
 COTABATO AGRICULTURE COLONIES, conditions at: 157.  
 COTTON, imports: 114.  
 COUNCIL OF HYGIENE, sessions: 94.  
 COURTS OF FIRST INSTANCE, cases tried: 126, 128.  
 CRONIN, MARCUS D., mentioned: 14.  
 CROPS, condition of: 150.  
 CURRENCY, circulation: 103, 112, 173.  
 CURRENCY LAW, revision: 104.  
 CUSTOMS, BUREAU OF, work of: 112.  
 CUSTOMS, COLLECTIONS, amount of: 116.  
 DENTAL EXAMINERS, BOARD OF, report of: 45.  
 DIPHTHERIA, cases of: 94.  
 DISTILLED SPIRITS, output: 119.  
 DISTRICT NURSING, value of: 96.  
 DRUGS, imports: 114.  
 DYES, imports: 114.  
 EASTERN EXTENSION AUSTRALASIA AND CHINA TELEGRAPH Co., transfer of lines of: 23, 178.  
 EDUCATION:  
   Agricultural schools: 88.  
   American teachers: 92.  
   Bureau, work of: 15, 85.  
   Eleemosynary institutions: 91.  
   Libraries: 90.  
   Non-Christian tribes: 38, 58.  
   Normal schools: 88.  
   Private schools, work of: 100.  
   School attendance of girls: 90.  
   Teachers and salaries: 15, 92.  
   Trade and special schools: 89.  
   Tuition fees: 87.  
 EDWARDS, H. T., mentioned: 17.  
 ELECTRIC LIGHT COMPANIES, number of: 134.  
 EMBROIDERIES, exports: 115.  
 EMIGRATION, conditions: 116.  
 EMPLOYEES:  
   Administration of estates of deceased: 135.  
   Charges against: 33.  
 EXECUTIVE BUREAU:  
   Financial statement: 35.  
   Work of: 12, 31.  
 EXPORTS, value of: 5, 17, 112.  
 FERGUSON, SAMUEL, mentioned: 7.  
 FERMENTED LIQUORS, taxes on: 120.  
 FIBERS, imports: 114.  
 FIBRE DIVISION, work of: 152.  
 FINANCE, SECRETARY OF, report of: 103-123.  
 FINANCES, statement of: 8.  
 FINANCE, DEPARTMENT OF, work of: 16.  
 FISHERIES, investigations: 166.  
 FISHING, conditions: 73.  
 FOOD AND DRUG, inspection of: 95, 171.  
 FOOD COMMISSION:  
   Expenditures: 155.  
   Work of: 154.  
 FOOD PRODUCTS, imports: 114.  
 FOREST PRODUCTS, receipts from: 22.  
 FOREST REGULATIONS, publication of: 160.  
 FORESTY, BUREAU OF, work of: 22, 158.  
 FRANCHISE TAXES, collections: 122.  
 FREE PATENTS, applications for: 162.  
 FRENCH, C. H., mentioned: 8.  
 FRIAR LANDS:  
   Administration of: 163.  
   Lots sold: 163.  
 GAMBLING, campaign against: 35.  
 GERMANS, interment: 5.

**GERMAN SHIPS:**

Disposition of: 4.

Seizure of: 4.

**GOLD ORE, exports:** 116.**GOLD STANDARD FUND, statement of:** 108.**HALL, GEN. HERMAN, mentioned:** 14.**HARRISON, FRANCIS BURTON, report of:** 1-24.**HATS, exports:** 115.**HEALTH OFFICERS, instructions for:** 167.**HEALTH SERVICE, work of:** 15.**HEMP:**

Exports, 17, 115.

Price of: 174.

**HOMESTEADS:**

Aids to: 158.

Applications for: 162.

**HOSPITALS:**

Management of: 95.

Philippine General—

Departments: 42-44.

Expenses: 44.

Organization: 42.

Patients: 44.

Personnel: 42.

Work of: 14.

**HYGIENE AND INDUSTRIAL DEVELOPMENT, OFFICE OF, work of:** 96.**ICE PLANT, operation of:** 178.**IMMIGRATION:**

Appropriation for: 179.

Conditions: 116.

**IMPORTS, value of:** 16, 112, 113.**INCOME TAX:**

Amount of: 18.

Collections: 122.

**INDEPENDENCE, desire for:** 6.**INSURANCE COMPANIES, value of transactions:** 122.**INSURANCE COMMISSIONER, work of:** 112.**INTERIOR, DEPARTMENT OF:**

Bureaus of: 25, 26.

Work of: 25, 26.

**INTERIOR, SECRETARY OF, report:** 25-101.**INTERNAL REVENUE:**

Apportionment of taxes: 119.

Collections: 18, 118.

Cost of collection: 119.

**INTERNAL REVENUE, BUREAU OF, work of:** 17.**IRON AND STEEL, imports:** 114.**IRRIGATION, appropriations for:** 176.**IWAHIG PENAL COLONY, conditions at:** 140.**JAKOSALEM, DIONISIO, report of:** 173-180.**JUSTICE, BUREAU OF, business transacted by:** 134.**JUSTICE, DEPARTMENT OF, work of:** 19.**JUSTICE, SECRETARY OF, report of:** 125-148.**JUSTICE OF THE PEACE COURTS, reports of:** 129.**KNIGHT, ADMIRAL AUSTIN M., mentioned:** 4.**LABOR, BUREAU OF, work of:** 24, 179.**LABORERS, distribution of:** 179.**LAND REGISTRATION OFFICE, expenses of, work of:** 129.**LAND—TITLE ASSURANCE FUND, statement of:** 109.**LANDS:**

Bureau of, work of: 161.

Public—

Coal claims: 163.

Division, work of: 162.

Foreshore and lands under water, applications for: 162.

Free patents, applications for: 162.

Homesteads, application for: 162.

Insular Government property, applications for: 163.

Leases, applications for: 162.

## LANDS—Continued.

## Public—Continued.

- Law division, work of: 164.
- Lode claims, registration of: 163.
- Placer claims, declaration for: 163.
- Reclaimed lands, application for: 163.
- Sales, applications for: 162.
- Surveying and drafting division, work of: 164.
- Surveys: 164.

## LEATHER GOODS, imports: 114.

## LEPERS, committee for examination of: 168.

## LIBERTY LOAN, subscriptions: 33.

## LICENSE TAXES, collections: 121.

## LIGHTHOUSE DIVISION, work of: 118.

## LIVE STOCK, importation: 151.

## LOCUST, eradication of: 153.

## LODE CLAIMS, registration of: 163.

## LUMBER:

## Exports: 115.

## Shipments of: 159.

## MADRIGAL, V., mentioned: 8.

## MAGUEY:

## Exports: 115.

## Production of: 150.

## MALCOLM, JUSTICE GEO., mentioned: 20.

## MANGO, cultivation of: 155.

## MANILA, CITY OF:

## Financial statement: 49.

## Mayor's office: 49.

## Municipal board: 49.

## Organization: 48.

## Personnel: 48.

## MANILA RAILROAD Co.:

## Management: 7.

## Profits: 7.

## MAPA, VICTORINO, report of: 125-148.

## MATCHES:

## Consumption: 121.

## Duty on: 6.

## Importation: 121.

## MEASLES, cases of: 94.

## MEDICINES, imports: 114.

## MEDICAL EXAMINERS, BOARD OF, report of: 45.

## MINDANAO AND SULU:

## Health conditions: 97.

*See also* Non-Christian tribes.

## MINING, development of: 171.

## MINT, establishment of: 7.

## MOMUNGAN AGRICULTURE COLONY, work of: 157.

## MORELAND, JUSTICE, resignation: 19.

## MOTOR TRANSPORTATION, standardization of Government: 166.

## MOTOR VEHICLES:

## Number of: 23.

## Registration: 177.

## MOVING PICTURES, industrial: 167.

## MUNICIPAL OFFICES, vacancies: 28.

## MUNICIPAL POLICE, number of: 14.

## MUNICIPALITIES:

## Officials—

## Charges against: 33, 34.

## Personnel: 32.

## NATIONAL COAL Co., organization: 8.

## NATIONAL GUARD:

## Appropriations for: 4.

## Barracks: 2.

## Composition: 2.

## Enlisted men, number of: 4.

## Location: 2, 3.

## Officers: 2, 3.



**NATIONAL GUARD—Continued.**

Organization: 2.

School: 2.

**NON-CHRISTIAN TRIBES, BUREAU OF:**

Agriculture: 38, 60.

Agricultural colonies: 38, 60.

Sanks and credits: 75.

Christian, Mohammedan, and Pagan religions: 37, 79.

Commerce and shipping: 73.

Conditions at the close of the year: 36, 55.

Finance: 39, 57.

Fishing: 73.

Forests: 72.

Immigration: 39, 68.

Inspections: 37, 76.

Justice: 64.

Legislation: 56.

Manufactures: 75.

Mineral products: 72.

Organization: 53.

Pearl fishing: 73.

Personnel: 36, 76.

Policy of the Government: 56.

Political conditions: 37, 75.

Population: 37, 55.

Prisons: 64.

Provincial and municipal organization: 37, 56.

Public health: 38, 59.

Public instruction: 38, 58.

Public lands: 71.

Public order: 37, 61.

Public works: 65.

Recommendations: 80.

Sponge fishing: 73.

Territorial jurisdiction: 37, 54.

Works among: 12, 29, 36.

**NORMAL SCHOOLS.** (*See Education.*)**O'DOHERTY, REV. MICHAEL,** mentioned: 7.**OILS,** imports: 114.**ORPHANAGE, GOVERNMENT:**

Financial statement: 48.

Location of: 47.

Orphans, number of: 47.

Personnel: 47.

Purposes of: 47.

**OSIAS CAMILO,** mentioned: 14.**PALMA, RAFAEL,** report of: 51.**Paper Factory:** Establishment: 7.**PEACE AND ORDER,** conditions of: 12, 30.**PEARL BUTTONS AND SHELLS,** exports: 115.**PEARL FISHERIES,** industry of: 73.**PEARL FISHING:**

Investigations: 73.

Taxes: 123.

**PEST,** control of: 153.**PHARMACEUTICAL EXAMINERS, BOARD OF,** report of: 44.**PHILIPPINE AGRICULTURAL CONGRESS,** session of: 167.**PHILIPPINE JOURNAL OF SCIENCE,** publication of: 171.**PHILIPPINE LEGISLATURE:**

Acts vetoed: 6.

Laws passed: 6.

Meetings of: 6.

**PHILIPPINE LIBRARY AND MUSEUM:**

Collections: 144.

Work of: 141.

**PHILIPPINE NATIONAL BANK:**

Emergency notes: 19.

Notes issued: 18.

Work of: 7.

**PLACER CLAIMS,** declarations for: 163.

- PLAGUES, cases of: 94.
- PLANT INDUSTRY DIVISION, work of: 151.
- POLICE, number of municipal: 40.
- POLITICS, conditions as to: 6.
- PORT WORKS, construction of: 176.
- POSTS, BUREAU OF:
  - Financial statement: 177.
  - Work of: 23.
- POTATOES, cultivation of: 156.
- PRINTING, BUREAU OF, work of: 123.
- PRISONERS:
  - Conduct of: 137.
  - Number of: 136.
- PRISONERS' COURT, operation of: 137.
- PRISONS:
  - Bureau of, work of: 20, 135.
  - Health conditions: 139.
  - Industrial division, work of: 138.
  - Schools: 139.
  - Maintenance, cost of: 137.
  - Population of: 135.
  - Provincial, report of: 138.
- PROPERTY, assessments: 82.
- PROPERTY—INSURANCE FUND, statement of: 109.
- PROSPERITY, conditions showing: 5.
- PROVINCIAL CEMETERIES, report on: 95.
- PROVINCIAL OFFICIALS, Filipino: 13.
- PROVINCES, personnel: 32.
- PUBLIC INSTRUCTION, DEPARTMENT OF, work of: 14.
- PUBLIC UTILITIES, number of: 134.
- PUBLIC UTILITIES COMMISSION, work of: 133.
- PUBLIC WORKS, BUREAU OF:
  - Employees of: 23.
  - Work of: 22, 174.
- PULP AND PAPER FACTORY, establishment of: 7.
- QUARANTINE SERVICE:
  - Financial statement: 99.
  - Work of: 97.
- QUEZON, HON. MANUEL L., mentioned: 8.
- REED, EUGENE E., mentioned: 8.
- RICE:
  - Cultivation: 21.
  - Imports: 114.
  - Production of: 150.
- RICE COLONIES, work of: 156.
- RINDERPEST:
  - Campaign against: 151.
  - Cases of: 21, 151.
  - Immunizing operations: 151.
- ROADS:
  - Appropriations for: 175.
  - Construction: 23.
  - Construction work: 175.
  - Maintenance, cost of: 23, 175.
  - Mileage: 175.
- ROXAS, HON. FELIX M., mentioned: 14.
- RURAL CREDIT ASSOCIATIONS, work of: 153.
- SANITARY WORK IN THE PROVINCES, report on: 95.
- SAN LAZARO ESTATE, administration of: 163.
- SAN RAMON PENAL FARM, conditions at: 140.
- SCHOOLS. (*See* Education.)
- SCIENCE, BUREAU OF, work of: 165.
- SECRET SERVICE, work of: 117.
- SEEDS, distribution of: 155.
- SHIPPING:
  - Coastwise: 116.
  - Condition of: 73, 173.
  - Foreign: 116.
  - Tonnage available: 22.

- SILKS, imports: 114.
- SILVER CERTIFICATES, issues of: 18, 103.
- SILVER, price of: 104.
- SMALLPOX, cases of: 15, 93.
- SMALLPOX VACCINE, manufacture of: 167.
- SPONGE FISHERIES, investigations: 73.
- SPONGE FISHING, taxes: 123.
- STILLS, number operated: 120.
- STORMS, damage from: 149.
- STREET, THOMAS A., appointment: 19.
- STRIKES, number of: 24, 179.
- SUGAR:
  - Exports: 115.
  - Output: 174.
  - Production: 5, 17, 150.
- SUPPLY, BUREAU OF, work of: 23, 178.
- SUPPLIES, standardization of: 166.
- SUPREME COURT:
  - Cases tried: 125.
  - Members of: 125.
- SURVEYS, work done: 164.
- TEACHERS. (*See* Education.)
- TELEPHONE COMPANIES, number of: 134.
- TIMBER, shipments of: 159.
- TIKITIKI EXTRACT, manufacture of: 167.
- TOBACCO:
  - Exports: 17, 18, 115.
  - Production of: 150.
  - Taxes on: 120.
- TONNAGE, amount of: 173.
- TRADE, value of: 112, 173.
- TRAUB, COL. PETER, work of: 63.
- TREASURY BUREAU, work of: 18.
- TREASURY:
  - Condition of: 104.
  - Funds, distribution of: 106-108.
  - Investments: 111.
  - Report of Bureau of: 105.
- TRENT, JUSTICE, resignation: 19.
- TUBERCULOSIS:
  - Cases of: 96.
  - Patients, treatment of: 25.
- TYPHOID FEVER, cases of: 94.
- TYPHOID VACCINE, manufacture of: 167.
- TYPHOON, damage done by: 149.
- TYPHOONS, prevalence of: 21.
- VACCINATIONS, number of: 16.
- VACCINE, manufacture of: 167.
- VEGETABLES, imports: 114.
- VESSELS:
  - Division, work of: 117.
  - Documentation and licenses: 117.
  - Inspection of: 117.
  - Number of: 113.
- VETERINARY DIVISION, work of: 151.
- WAR, effects on the Philippine Islands: 4.
- WATER WORKS, construction: 178.
- WEATHER BUREAU, work of: 172.
- WELFARE BOARD, work of: 101.
- WESTERHOUSE, E. J., mentioned: 8.
- WOOD MANUFACTURES, imports: 114.
- WOOLEN MANUFACTURES, imports: 114.
- YEATER, CHARLES EMMET:
  - Appointment: 10.
  - Report of: 85-101.















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